Petition

81-1065

No.

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CLERK

IN THE

Supreme Court of the United States

October Term, 1981

VILLANEUVA COMPANIA NAVIERA, S.A.,
Petitioner

v.

BANKERS TRUST COMPANY, et al.,
Respondents

PETITION FOR A WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE THIRD CIRCUIT

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QUESTIONS PRESENTED

1. Did the Court of Appeals in reversing the District Court correctly apply the clearly erroneous standard of review in admiralty when it is manifest that the Court of Appeals made several egregious errors of fact and also without supporting evidence substituted its own misconceived views for those of the technical experts heard and correctly understood by the District Court, and where the Court of Appeals rejected a recording device as lacking probative value for monitoring a vessel's engine performance, notwithstanding that two officers of the vessel owner admitted that the device was placed on the vessel for the specific purpose of monitoring her performance?

2. Was the Court of Appeals clearly erroneous in reversing the District Court which on substantial evidence denied a vessel owner's limitation of liability for a collision caused by the owner's sole fault, when the vessel owner had actual and constructive notice of astern turbine power deficiencies rendering the vessel unseaworthy because of her reduced backing power making her unable to avoid collision with a properly moored vessel?

3. Was the District Court clearly erroneous in finding on substantial evidence that a vessel owner should not be allowed to limit his liability for a collision caused by his sole fault, when the President and two officers of the owner admitted that there was no review of the records, and that the information available from a recording device would have revealed the vessel's inability to achieve the full astern RPM's ordered?

4. Was the Court of Appeals clearly erroneous in reversing the District Court which on substantial evidence denied a vessel owner limitation of liability for a collision caused by his sole fault, when the Court of Appeals held *de novo* that it is "hindsight" to hold a vessel owner responsible for information he could have obtained by regu-

lar examination of recorder tapes specifically admitted by two officers of the owner to have been placed on the vessel for the very purpose of monitoring the vessel's engine performance, and when such review would have disclosed the vessel's reduced backing power and her inability to achieve the full astern RPM's ordered?

5. Was the Court of Appeals clearly erroneous in reversing the District Court's decision based on substantial evidence that a vessel owner should reasonably be on notice of the need for further inquiry into the condition of the astern turbine which may be damaged if the astern guardian valve breaks up, when the owners' shore management breached its non-delegable duty to have the valve opened after actual notice that her astern guardian valve was jamming and sticking, and particularly when the valve's operating manual in the owners' possession warned that jamming and sticking could be an indication of damage to the valve?

6. Was the Court of Appeals clearly erroneous in reversing the District Court's decision based on substantial evidence that a vessel owner should reasonably be on notice of the need for further inquiry into the condition of the backing power of the vessel when the master declines to perform a routine safety crash stop test requested by owners, because he fears "probable damage" to the vessel's intricate propulsion system, particularly when the President and two officers of the vessel owner each specifically admitted that upon receipt of the master's letter a follow-up investigation should have been undertaken to ascertain the reasons for the Master's apprehension?

7. Was the Court of Appeals clearly erroneous in reversing the District Court's decision based on substantial evidence that a vessel owner should reasonably be on notice of the need for further inquiry into the condition of the vessel's backing power when damage is found to have

been sustained by the identical astern turbine of her sister ship about one year before the QUEENY's collision, and when the QUEENY's astern turbine was found similarly damaged immediately after her collision with the CORINTHOS, particularly when taken together with the other substantial evidence accepted by the Trial Court that further inquiry would have revealed turbine damage and reduced power on the QUEENY?

8. Was the Court of Appeals clearly erroneous in reversing the District Court's decision based on substantial evidence that a vessel owner should not be granted the right to limit his liability for a collision caused by his sole fault when the owner failed to carry his burden of proving lack of privity and knowledge, and particularly when the owner admittedly had available the means of knowing of his vessel's unseaworthiness and her reduced backing power?

9. Was The Court of Appeals clearly erroneous in reversing the District Court's decision based on substantial evidence that a vessel owner should not be allowed to limit his liability for a collision caused by his sole fault and resulting from the vessel's reduced backing power, when the Court of Appeals clearly erroneously refused to recognize (a) that the vessel owner had the burden of proving he had no knowledge or means of knowing that the engines were unseaworthy and incapable of full rated backing power; (b) that the vessel owner had failed to carry his burden of proof by merely alleging ignorance and by failing to offer any evidence justifying his lack of knowledge or inability to learn of the unseaworthiness of her engines; and (c) failed to rebut uncontradicted evidence of the availability of recorded data from a reliable monitoring device, particularly when the data from such monitoring device would have revealed the vessel's unseaworthiness and her reduced backing power?

10. Was the Court of Appeals clearly erroneous when it reversed the District Court and held that certain data and information from the recording tapes of a device installed for the specific purpose of monitoring the performance of the vessel's engines did not constitute evidence of an available source of knowledge and notice of the performance of the vessel's astern turbine merely because the Court of Appeals found that certain of the tapes were not admitted into evidence while finding that certain other tapes were admitted, notwithstanding that the District Court on substantial evidence had concluded from the live testimony of several fact and expert witnesses for both sides that such data and information from the tapes was authentic, reliable and available, and particularly when the Trial Court had also concluded on substantial evidence that the data actually established that the vessel's engines were unseaworthy because of reduced backing power revealed by her inability to achieve the full astern RPM's ordered?

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OPINIONS BELOW

The Opinion of the United States Court of Appeals for the Third Circuit dated May 15, 1981, reported at 651 F. 2d 160 (3d Cir. 1981), 1981 AMC 1497,[1] (A1-A33), reversed the order of the United States District Court for the Eastern District of Pennsylvania in Civil Action No. 75-364 dated February 19, 1980 and allowed the QUEENY to limit liability for damages arising out of the collision of the S/T EDGAR M. QUEENY with the S/T CORINTHOS. (A1). The Memorandum Opinion of the District Court, reported at 503 F. Supp. 337 (E. D. Pa. 1980), 1980 AMC 484 (A35), found that the QUEENY interests had sufficient privity and a means of knowledge of her deficient backing power to deny them the right to limit liability under the Limitation of Vessel Owner's Liability Act, 46 U. S. C. § 181, *et seq.*

The case was remanded by the Court of Appeals for "further proceedings consistent with this opinion", (A31), but the mandate has been stayed by the Third Circuit pending resolution of this petition seeking review of the issue of notice to the QUEENY's owners, charterers and operators (referred to hereinafter as the "QUEENY interests" or "Keystone interests").

The Petition of Villaneuva[2] for Rehearing *En Banc* to the Third Circuit (A79) was denied without opinion

1. Parties to this proceeding below included Villaneuva Compania Naviera, S.A. (owner of the steam tanker CORINTHOS), BP/Sohio (owner/operator of the Oil Terminal at Marcus Hook, Pennsylvania at which CORINTHOS was moored); Bankers Trust Company (owner of the steam tanker EDGAR M. QUEENY); Monsanto Company (Bareboat Charterer of the QUEENY); Keystone Shipping Company (Operator of the QUEENY); Bethlehem Steel Corporation (builders of the QUEENY); General Electric Company (builders of the turbine of the QUEENY); The William Powell Company (manufacturers of the astern guardian valve of the QUEENY). Bethlehem Steel, General Electric and the Powell Company were granted separate trials from the Limitation Proceeding prior to the commencement of this trial.

2. Villaneuva Compania Naviera, S.A. although organized as a corporation is not a subsidiary or affiliate of any publicly owned corporation.

by Order of that Court on July 8, 1981. (A73). Villaneuva initially requested a stay of the mandate on July 15, 1981 and it was granted on August 6, 1981. (A75). This was done to obtain time to report to Villaneuva, and receive instructions. Thereafter, on October 6, 1981 Keystone moved to continue the stay. Villaneuva, on instructions, opposed the continuance of the stay to permit the remand to the District Court. For some reason not stated, the Third Circuit declined to vacate the stay preventing remand, by order dated November 3, 1981. (A78). The above Opinions, Orders and Petition for Rehearing *En Banc* are reproduced in the Appendix to this Petition.

JURISDICTION

The Judgment and Opinion of the Court of Appeals for the Third Circuit was filed on May 15, 1981. Villaneuva then filed a Petition for Rehearing *En Banc* on June 19, 1981 which was denied by Order of the Court on July 8, 1981. Petitioner moved this Honorable Court for a Continuance for filing this Petition. The continuance was granted extending the time to file this Petition to and including December 5, 1981. This Petition has been filed within the limit of that extension. The jurisdiction of this Court is invoked under 28 U. S. C. § 1254(1).

STATUTES INVOLVED

Section 183 of the Limitation of Vessel Owner's Liability Act, 46 U. S. C. § 181, *et seq.*, is set out *verbatim* in the Appendix of this Petition. (A97-A98).

STATEMENT OF THE CASE

In the early morning hours of January 31, 1975 the chemical carrier EDGAR M. QUEENY, while attempting to make a 180° turn in the Delaware River at Marcus Hook, Pennsylvania, collided, without warning, with the

steam tanker CORINTHOS which was properly moored, discharging her cargo of crude oil at the B/P Sohio Terminal in Marcus Hook. The force of the collision compressed the hull of the CORINTHOS against the pier and, moments after the first contact, the port anchor of the QUEENY punctured the port cargo tanks nos. 4 and 5 of the CORINTHOS, tearing her steel hull and setting off several explosions and fires. The CORINTHOS was immediately engulfed in flames and wracked by repeated explosions. She continued to burn for several days and became a total loss.

As a result of the collision and the several related explosions and fires, twenty-six (26) people died or were missing and many more were injured. The CORINTHOS and the pier were totally destroyed and other adjacent and nearby property was extensively damaged. The EDGAR M. QUEENY sustained relatively minor damage.

Both vessels petitioned to limit their liability and the CORINTHOS also sought exoneration, all of the proceedings taking place in the Eastern District of Pennsylvania. The CORINTHOS was granted exoneration and limitation. The QUEENY conceded liability on the second day of trial. (A10).

After six (6) weeks of trial in July and August, 1979, which included the testimony of 8 live fact witnesses and 17 expert witnesses, the District Court filed a well reasoned Opinion upon full consideration of the credible evidence and reasonable inferences drawn therefrom. The Trial Court quite correctly concluded that a contributing cause of the collision was an ascertainable "deficiency in the [QUEENY's] turbine's performance" because the QUEENY could not achieve astern RPM as ordered (A55) and that "the inability of the vessel to produce 76 astern RPM's was a contributing cause of the collision", (A51). This finding of deficient astern turbine performance and its causation of the collision was not appealed and was not disturbed by the Court of Appeals.

In reaching the conclusion that the QUEENY's astern power was "reduced", the District Court stated that "[t]he significance of the reduced astern power is manifest". (A47).

The District Court heard and relied upon Dr. Corlett, a world renowned hydrodynamicist and naval architect, whose conclusion of a backing power deficiency was based on his hydrodynamic analysis. The District Court was fully justified in relying on his calculations of the effect of the QUEENY's actual full astern order achieved (65 RPM) on the night of the collision as compared with her "as built" capacity of 76.3 RPM determined at builder's sea trials.

Dr. Corlett's conclusions were stated in part in his report as follows:

> "(f) That the astern capability of EMQ [EDGAR M. QUEENY] on the day of the accident was *gravely deficient* from the specified, designed and achieved on trials capability. (emphasis added)
>
> (g) That the astern capability available was gravely deficient from ABS Classification Requirements. (See ABS 'Rules for Building and Classing Steel Vessels'—1968, section 33.41, page 186.)
>
> (h) That if the proper astern capabiility as demonstrated on trials had been available at the time Astern was ordered, EMQ would have stopped dead in the water about 250-300 ft. clear of COS. [CORINTHOS] This applies to both Figs. 1.2 and 1.5., i.e. for 23% and 40% added mass." (C-87, 3027a)

Apart from Dr. Corlett's hydrodynamic analysis which showed deficient backing capacity, he also based his conclusions of reduced backing power on his analysis and calculations from the intervening four years of RPM recorder tapes which he placed on Figure 10.1, a part of his report. (A108). Figure 10.1 graphically showed the

difference between RPM commanded by the vessel's engineers and RPM response achieved by the engines.

In reversing the conclusion of the District Court that the QUEENY's owners had a reasonable means of knowledge of reduced astern RPM's in the form of tapes, the Court of Appeals mistakenly rejected the District Court's reliance upon Dr. Corlett's evidence, his conclusions and the inferences drawn therefrom (3027a-3028a), as well as his report. His report and conclusions were admitted into evidence to the extent necessary to buttress his opinion that the vessel had "gravely deficient backing power" on the night of the collision. (C-87, 3014a-3117a, A108 & A103). In effect, his entire report was therefore necessarily admitted.

The District Court held on substantial evidence that the shore management of the QUEENY knew or should have known of the vessel's deficient backing power which rendered her unseaworthy and correctly denied the Keystone interests any limitation of liability against provable losses of about $35 million without interest claimed for loss of life, personal injuries and extensive property damage. (A56).

The Trial Court also properly relied on the testimony of Dr. Otto Geisler, an eminent steam turbine designer.

Dr. Geisler analyzed photographs and survey reports of the QUEENY's damaged astern turbine, made when the turbine was opened after the collision, calculated the steam flow through the damaged turbine blades and concluded that the QUEENY's astern propulsion power had deteriorated by 43.3% on the night of the collision. (1314a, 1319a).

The analysis of Messrs. Corlett and Geisler was independently supported by each other's analysis and opinion. Moreover, their independently reached conclusions that the power generated by the QUEENY's engines on the night of the collision had deteriorated from the power achieved at sea trials (an interval of about 4½ years) was

an inference reasonably drawn by the District Court from all the substantial evidence in the record. This conclusion was also supported by data from the RPM recording tapes concededly in evidence from the vessel itself showing her astern turbine performance on (1) sea trials and (2) the night of the collision.

The authenticity, relevance, admissibility and probative value of the tapes on these two occasions was affirmed by the Court of Appeals. (A22).[3] However, the Court of Appeals decided that the tapes for the intervening four years were not admitted into evidence and that they had "minimum probative value if any." (A23).

As to all of the RPM recorder tapes, the District Court heard unrebutted evidence from Keystone's President and Vice President of Operations that the RPM recording device was placed on the QUEENY and several other vessels in the Keystone fleet for the specific purpose of monitoring engine performance (Kurz 1393a-1394a; Williams 1726a-1729a, 1819a). The District Court also heard expert testimony presented by all parties as to the availability, reliability and accuracy of the tapes and was fully justified in concluding on all the substantial evidence that all three categories of tapes were reliable and constituted a reasonable source of knowledge for the vessel owner. (A55).

The Court of Appeals had no discernible basis for reversing the District Court's conclusion as to notice which was based on substantial evidence of the owner's admitted means of knowing of her power deficiency, nor for deni-

3. Independent sources of information of an astern turbine power deficiency were: (a) Dr. Corlett's analysis and comparison of sea trial RPM recorder tapes and the tapes on the night of the collision; (b) Dr. Geisler's quantitative analysis, research and calculations of astern turbine loss of power; (c) Dr. Corlett's hydrodynamic analysis of the vessel's advance and transfer through the water. The vessel should have been able to stop short of striking the CORINTHOS if, at the point full astern was ordered, she had available her full rated astern RPM's (Matrix Exhibit C-343, 3282a).

grating the quality of the notice based on the four years intervening tapes, having accepted in evidence the sea trial tapes and the collision tapes.

In this case since the executive officers of Keystone specifically admitted that all such tapes (including the intervening 4½ years of tapes) existed for the very purpose of monitoring the vessel's engine performance, there is no basis for the Court of Appeals' rejection of the finding that the tapes were notice of deficient backing power.

Furthermore, the Court of Appeals clearly erroneously became enmeshed in a false issue as to whether or not the intervening four years of tapes were admitted into evidence. The Court of Appeals made a definite mistake in assuming that it was necessary for these tapes to be in evidence (a) to support the conclusions of the District Court based on all the substantial evidence and on the conclusions of Dr. Corlett as to notice (A23) and (b) even if the tapes were admitted, the Court of Appeals again lost its way by making another serious and definite mistake: it held that those tapes could not be probative as to notice of the defective and disintegrated astern guardian valve, mistakenly referring to the *guardian valve* instead of the *astern turbine*. (A16).

Even if the intervening tapes were not admitted by the District Court, the Court of Appeals failed to appreciate that the existence of the intervening tapes was admitted by officers of Keystone to have been installed on the vessel for the very purpose of monitoring the vessel's engine performance and as such the tapes were admittedly reasonable and probative notice to shore management. (See Point I D, *infra* p. 23).

The Court of Appeals also made a clear and definite mistake when it failed to understand that the data, calculations and conclusions from Dr. Corlett's analysis of the tapes were actually admitted in evidence by the Trial Court. (See Point I D, *infra* p. 23).

In all the foregoing circumstances, the conclusion of

the Third Circuit was just wrong in stating that Dr. Corlett:

> ". . . nowhere expressed an opinion related to the performance of the QUEENY over her sea life from the time of the sea trials until the accident." (A23).

The District Court on several occasions demonstrated its awareness of Dr. Corlett's often expressed conclusions that the backing power had deteriorated over a period of time. (853a, 854a, 855a, 3282a, C-343).

A comparison of the sea trial tapes (showing her rated astern capacity to back down) with the tapes on the night of the collision, (showing inability to achieve ordered astern RPM) raised a strong presumption that the QUEENY interests should have known that she was unseaworthy for some period of time prior to the collision. The District Court was justified in so inferring on substantial evidence.

Another serious mistake of the Court of Appeals turned on its critical misconception about the astern guardian valve. The Third Circuit incorrectly related the intervening 4 years of tapes to notice of an astern *guardian valve* problem. The Appellate Panel failed to understand that the tapes gave notice of the astern *turbine* problem. Such notice placed on the owners a duty of reasonable inquiry. The mistaken conclusion of the Court of Appeals that the obligation of notice arising from the RPM recorder tapes is "hindsight" and that the tapes had "minimum probative value if any," was undoubtedly directed to the astern guardian valve. Had the Court of Appeals understood that the RPM recorder tapes gave notice of the astern turbine problem, it seems likely that the decision of the District Court on privity and knowledge would not have been reversed.

It is true that data from the tapes (or even the tapes themselves) did not indicate the specific cause of the vessel's reduced backing power, i.e., whether from a dam-

aged turbine or a defective astern guardian valve. However, the District Court was clear on this point:

> "If Keystone had been reviewing the graph tapes, they would have discovered the problems associated with the functioning of the astern turbine." (A56).

The District Court found on substantial evidence that if the company had followed up the tape data of deficient astern power as well as the vessel's visible inability to achieve the astern RPM's ordered, it would have discovered the problems associated with the functioning of the astern turbine.

The District Court also found that the QUEENY shore management should have known of her astern turbine and guardian valve deficiencies as a result of three other factors which the Third Circuit roundly criticized as "unrealistic". These were: (1) Astern guardian valve problems (jamming and sticking) on the QUEENY's maiden voyage; (2) Problems of a sister ship; and (3) The letter of the QUEENY's master to shore management. (Point I, *infra* pp. 12 to 27).

The panel accused the Trial Court of reliance on "hindsight" and held that the conclusions of the District Court were based on standards of care "patently divorced from reality." (A19).

Although the Third Circuit admitted it was applying a "landlubbers" analogy, it has rather surprisingly allowed the vessel owner a standard of inattention and lack of care long since recognized as unacceptable by this Court and several circuit courts.

In summary, the Court of Appeals committed the following definite and serious mistakes: (1) It concluded that the District Court had no basis for concluding that the QUEENY had deficient backing power, notwithstanding that sea trial tapes and the collision tapes were compared and her backing power was found deficient; (2) It mistook evidence of notice as to the deficiency of the astern turbine for evidence of a defective astern guardian

valve; (3) It concluded that the sea trial tapes, the intervening tapes and the collision tapes admittedly placed on the vessel to monitor engine performance could not constitute notice of such performance because (a) they were not in evidence and (b) were not probative; (4) The Court of Appeals misquoted the Master's letter of March 12, 1972 erroneously substituting "might" for "probable" damage in his report to owners that the full astern test was not done because of his apprehension of "probable damage to the intricate propulsion system". This has resulted in a significant misconception by the Court of Appeals of the likelihood of damage according to the Master. The Court has therefore underestimated the degree of probability of damage and overlooked the impact it should have had on shore management, according to the admission of Keystone's own officers. (A24).

REASONS FOR GRANTING THE WRIT

The Limitation of Vessel Owners' Liability Act, 46 U. S. C. § 181, *et seq.*, provides that a vessel owner may be granted the right to limit his liability only if he sustains his burden of proving his lack of privity or no means of knowledge of the negligence or unseaworthy condition of the vessel which caused or contributed to the casualty. (A97-A98).

The Court of Appeals for the Third Circuit in outlining the law of privity in general surprisingly failed to show any realistic comprehension of the operative facts applicable to the law of privity and knowledge which should bind a shipowner who has access to a reasonably reliable means of knowledge of his vessel's underway performance.

The Court of Appeals ignored and misapplied substantial evidence which established the existence of reliable sources of knowledge in the form of some well-recognized tape recording devices admittedly installed for monitoring the vessel's engine performance.

The panel has seriously misunderstood or misconceived the operative facts which support the Trial Court's conclusions and the inferences that the owners had privity and a means of knowledge of the vessel's unseaworthiness.

The decision of the Appellate Court appears to be an improper exercise of *de novo* fact finding to revise and/or reject the Trial Court's findings of credibility of expert and fact witnesses and to substitute its own views on technical matters in areas of marine management and operations, rejecting the admissions, observations and strong inferences drawn by the Trial Court after hearing 25 live fact and expert witnesses.

The District Court on substantial evidence found that the owners of the QUEENY had the means of acquiring knowledge of the vessel's deficient backing power and were properly charged with knowledge of what would be revealed by a reasonable investigation of that means of knowledge. These sources of information placed the owners under the obligation to undertake further inquiry.

The Third Circuit nevertheless rejected the Trial Court's conclusions despite substantial evidence that reasonable investigation would have revealed the vessel's deficient backing power if owners had taken action (1) after the sticking and jamming of the astern guardian valve which was the subject of a warning in the valve maker's manual; (2) after the master's letter of March 12, 1972 to the Vice President of Operations expressing apprehension of "probable" damage if he performed a routine safety test; (3) after discovery of astern turbine damage sustained by a sister ship over one year before the collision; and (4) upon reviewing on a regular basis the information and data from the RPM recorder tapes which although received ashore were not reviewed or examined at anytime by shore personnel, despite admittedly having been placed aboard the vessel for the very purpose of monitoring her engine performance.

The United States Supreme Court has long since established that a vessel owner's means of acquiring knowledge is sufficient to charge him with responsibility for the information which would have been revealed by using the means of acquiring such information.

I. The Decision of the Court of Appeals for the Third Circuit in Allowing the QUEENY Interests to Limit Their Liability is Based on Several Mistakes of Fact in the Record, Ignores the Overwhelming Weight of the Credible Evidence and is Contrary to Decisions of the United States Supreme Court and the Courts of Appeals of Several Circuits.

The United States Supreme Court has ruled that a vessel owner who seeks limitation of liability has the burden of proving that he has no knowledge or access to information about the vessel's unseaworthy condition which caused the accident.

In *Spencer Kellogg & Sons, Inc. v. Hicks*, 285 U. S. 502 (1932) the Supreme Court affirmed the decree in admiralty which denied owners petition for limitation of liability. The vessel, LINSEED KING, ferrying workmen on the Hudson River, struck ice floes in the river, sank and killed at least 35 men. The Supreme Court stated that the right to limit in the case before it, turned on whether the negligence of the works manager (Stover) in permitting the ferriage operation in ice without inspecting the river for ice, was privity and knowledge that bound the owner:

> "Before allowing the ferriage operation he was under obligation to assure himself by inquiries or by personal inspection that the 'LINSEED KING' should not incur the hazard of colliding, as she did, with ice floes in the river." (p. 510).
>
> * * *
>
> "The conditions on the morning in question could have been ascertained by Stover, [the works man-

ager] if he had used reasonable diligence, and we think the evidence is adequate to support the finding that the negligence which caused the disaster was with his, and therefore with the owner's, privity or knowledge." (p. 512)

All of the circuits except for the recent decision of the Third Circuit (Petition for Rehearing *En Banc*, denied, A72-A73) have uniformly followed the LINSEED KING and have ruled that the vessel owner may not limit his liability if he had a means of knowledge and failed to use it.

In *Tug Ocean Prince, Inc. v. United States*, 584 F. 2d 1151 (2nd Cir. 1978), *cert. denied*, 440 U. S. 959 (1979), a tug was dispatched to the Hudson River during icy conditions with a pilot who had no familiarity with the river. The barge towed by the tug grounded and the Court held:

"The grounding of the Barge New London did not occur because of a single separate incident. It was the result of an accumulation of acts, all of which originated with Red Star's management, resulting in an easily foreseeable casualty. Where, as here, Red Star by prior action or inaction set into motion a chain of circumstances which may be a contributing cause even though not the immediate or proximate cause of a casualty, the right to limitation is properly denied. *Waterman Steamship Corp. v. Gay Cotton*, 414 F. 2d 724 (9th Cir. 1969). Red Star's actions must be considered as causative when establishing fault in the grounding of the barge, and as such they come within the privity and knowledge of Red Star." (p. 1158)

See also, *Petition of Henry Du Bois' Sons Co.*, 189 F. Supp. 400 (S. D. N. Y. 1960).

In the *MARINE FLORIDIAN*—Limitation Proceeding, at 1980 AMC 983 (E. D. Va. 1978), *aff'd*, 1980 AMC 1002 (4th Cir. 1979) (not officially reported) owners

sought exoneration or limitation of liability for a collision with a bridge. The Court found that although the FLORIDIAN was equipped with a starboard and port steering unit immediately before this casualty, only the port unit had been put in operation. The Superintendent and port engineer admitted knowledge of the vessel's use of only one steering unit in violation of the operator's directive to use two steering engines. The Court stated:

> "Here, management knew only one steering unit was being used in restrictive waters. Under such operating procedure, other precautions were required and it was management's responsibility to institute them. Management cannot escape responsibility by a mere failure to do nothing and sticking its head in the sand." (p. 997)

In *Avera v. Florida Towing Corp.*, 322 F. 2d 155 (5th Cir. 1963), the Court stated:

> "With the duty to make inquiry 'the measure' of the knowledge 'is not what the owner knows, but what he is charged with finding out.' . . . For '. . . knowledge means not only personal cognizance but also the means of knowledge—of which the owner or his superintendent is bound to avail himself—of contemplated loss, or condition likely to produce or contribute to loss unless appropriate means are adopted to prevent it.'" . . . (p. 166)

The Court found that the president, general manager and sole shareholder of the corporate owner of a tug,

> "had the obligation to police compliance with prohibitory instructions and from his failure to do so, he, and through him, the corporation, must bear the consequences of what inquiry would have revealed." (p. 166)

In *China Union Lines, Ltd. v. A. O. Andersen & Co.*, 364 F. 2d 769 (5th Cir. 1966), *cert. denied*, 368 U. S. 933 (1967), the M/V UNION RELIANCE suffered steering

failure and collided with the BEREAN. The District Court denied the petition for limitation of the owners of the RELIANCE. The Court of Appeals found evidence in the record indicating that only a limited inspection of the vessel was made by owners representatives when owners purchased the vessel. However, even in the limited inspection it was found that conditions in the engine room were substandard. The first chief engineer recommended to the company that all auxiliary engineering equipment be opened, inspected and overhauled. The Court found:

> "Nothing was done on this recommendation. China Union, evidently in an effort to save expenses, did not make such inspections, breakdown or overhaul. The testimony is quite clear that China Union would not permit a thorough inspection of the steering gear while the ship was in Taiwan. . . . Likewise, the judge's findings that the vessel was unseaworthy in the other respects with the privity and knowledge of China Union are as fully supported by the evidence." (p. 787)

In *The CLEVECO*, 154 F. 2d 605, 613-614 (6th Cir. 1946), the Sixth Circuit formulated the definition of privity and knowledge frequently cited by other circuits; the Court concluded:

> "From a consideration of the evidence, it is our conclusion that not only did appellant fail to sustain the burden of proof that it lacked knowledge of the fact that the Admiral was unseaworthy, but it further appears that the evidence supports the conclusion that the owner should have known that the tug was not seaworthy at the time it sank; that the loss, as the trial court found, was due to the negligence of the owner in failing to use due care in furnishing the crew members with a seaworthy vessel for the voyage undertaken; and that its dispatch of the vessel on this particular voyage at that time of year, considering the lack of stability of the tug Admiral, and the diffi-

> culty, if not impossibility, of navigating her in accordance with the prescribed retrictions, was productive of the injuries and damages, and was such negligence as rendered the owner liable for the loss sustained." (p. 614)

In *Waterman Steamship Corp. v. Gay Cottons,* 414 F. 2d 724 (9th Cir. 1969) the evidence indicated that the vessel's radio direction finder had not been accurately calibrated, as required by statute. The Court held that the owner, who was petitioning for limitation had not met its burden to prove that the lack of an efficient radio direction finder could not have been a cause of the accident. The Court held:

> "An owner must avail itself of whatever means of knowledge are reasonably necessary to prevent conditions likely to cause losses. 'If lack of actual knowledge were enough, imbecility, real or assumed, on the part of owners would be at a premium.' The ARGENT, *supra,* 1940 A. M. C. at 509." (footnote omitted) (P. 732).
>
> • • •
>
> "As we have previously pointed out, an owner cannot close its eyes to what prudent inspection would disclose. See *States Steamship Co. v. United States,* (THE PENNSYLVANIA), *supra,* 259 F. 2d at 466. This is just what Waterman did in this case. We conclude that a finding of lack of privity or knowledge on Waterman's part would be clearly erroneous." (p. 739).

In the case of the EDGAR M. QUEENY, the Court of Appeals confirmed that the vessel's RPM recorder tapes for the night of the accident were admitted into evidence. (A22). These tapes showed reduced backing power. Also, Dr. Corlett compared this deficient backing power on January 31, 1975 with her "as built" full astern RPM from her sea trials taken in August of 1970. (A23). The District Court reasonably inferred from Dr. Corlett's con-

clusions and his report that her backing power was gravely deficient for some time prior to the collision (C-87, 3027a, A54). The District Court, properly drawing the inference of deteriorated backing power over some period of time from all the evidence, concluded:

> "However, on the night of the collision, the astern turbine did not produce the guaranteed level of astern RPM's. It is clear that the condition of the Queeny's astern turbine rendered her unseaworthy. (A48).

The question of whether a party has met the burden of proof is particularly one for the trial court. *Welded Tube Company of America v. Phoenix Steel Corp.*, 512 F. 2d 342, 346 (3rd Cir. 1975).

The Third Circuit failed to perceive that QUEENY interests did not carry their burden of proving that they had no means of knowledge of her unseaworthiness prior to the collision, once it was established that she was unseaworthy on the night of the collision. The Court of Appeals, therefore, should have held that the denial of limitation was proper for that reason alone.[4]

A. Keystone's Officers Admittedly Failed to Inquire of the QUEENY's Master His Reason for Apprehension to Perform a Crash Stop Test in 1972.

By master's circular no. 5565, dated February, 1972 Keystone shore management requested that all vessels in their fleet which had not performed a crash stop test on sea trials, perform such a test and advise shore management of the results. Although a crash stop test had been performed in August, 1970, during the QUEENY's sea trials at the time of her delivery, her master wrote a letter

4. The erroneous Court of Appeals finding that the data and information from the intervening four years of tapes was not admitted is indeed a false issue since the denial of limitation was supportable on other grounds. *Infra*, pp. 18-26; *supra*, pp. 5, 6, 8-11, 16.

two years later on March 12, 1972 to Keystone's Vice President in Charge of Operations:

> "I feel apprehensive to perform the crash stop for the undue strain on the tank bulkheads due to the excessive vibration which may result to the early crystallization of the weak structural sections, not mentioning *probable damage to the intricate propulsion system.*" [5] (emphasis added) (Q-9, 2957a).

The apprehension of the master that such a test would *probably damage* the vessel's propulsion machinery is unequivocal; but he specified no reason in his letter.

The testimony of both fact and expert witnesses clearly established that a vessel the age of the QUEENY at the time of the collision could be expected to be able to perform such a routine maneuver without damage to its propulsion machinery unless it was already damaged, or her officers feared that damage had already occurred. (Corlett 756a, 757a; Winer 642a).

Three officers, Adolf Kurz, President of Keystone Shipping Company, the QUEENY's operator; the Vice President of Operations, Chester C. Williams; and Robert Doerr, Manager of Maintenance and Repair, admitted that some further action or inquiry by shore management was necessary after receiving the master's letter. (Kurz, 1392a, 1393a; Williams 1813a-1815a; Doerr 2545a-2548a). The three officers admitted they made no further inquiry and no further action was taken by shore management.

Since Keystone did not undertake any investigation, it is chargeable with knowledge of what a reasonable inquiry would have revealed concerning the reasons for the captain's fear of "*probable damage*" to the engines. (em-

5. The Court of Appeals misquoted the master's letter of March 12, 1972 as follows: "such a test might damage the intricate and delicate propulsion system". (A24). The likelihood of damage was changed by the panel to "might" from the master's estimate of "probable". This misunderstanding of the evidence as to the likelihood of damage and the issue of "notice" and its impact on management is indeed a critical mistake.

phasis added). The experts testified that a proper investigation into the reduced backing power would have required the opening of the astern turbine at which time its damage would have been discovered.

The District Court, having heard the testimony of Captain Kellog on this point and having observed his demeanor on the witness stand, rejected the master's self-serving attempts to explain away the clear import of the language of his letter. The District Court was not clearly erroneous in drawing such inference and concluding that such a letter indicating *probable damage* should have placed Keystone on notice of what a reasonable investigation would have revealed, i.e., damage to the turbine resulting in reduced astern power. This conclusion and the strong inferences drawn therefrom by the District Court should not have been reversed by the Court of Appeals. (A56).

The Court of Appeals misconstrued the purpose for which the master's letter was offered. The panel was clearly erroneous in stating:

> ". . . there simply is not enough evidence in the record to lead us to the conclusion that Kellog's letter was related to the valve problem, or that it should have led Keystone to the discovery of the problem with the QUEENY's valve." (A25).

This holding of the Court of Appeals is wide of the mark because none of the claimants contended that the master's letter should have placed the Keystone shore management on notice of damage to the astern *guardian valve.*

On the contrary, the letter was offered to place on management a duty of further inquiry into the vessel's reduced backing power and the condition of her astern *turbine.* For this reason, it seems apparent that the Court of Appeals made a serious mistake and entirely misconceived the significance of the notice to Keystone of "*probable damage* to the intricate propulsion system" if a routine

safety test were performed. (2957a); (emphasis added).

The District Court understood that the notice was directed to the *turbine* and not the *valve*. (A56). In these circumstances, the Court of Appeals was clearly erroneous in overturning the conclusion of the District Court on this point, particularly since the three Keystone officials admitted specifically that further inquiry was required. The Third Circuit has thus declined to accede to a standard of notice which the company's own officers considered proper.

B. The Manufacturer's Manual in Keystone's Possession for the Maintenance and Operation of the Astern Guardian Valve Specifically Warned Keystone That Jamming Could Indicate Damage to the Valve.

In September of 1970, when the vessel was first delivered, there were a number of instances in the vessel correspondence which revealed that the astern guardian valve was sticking and jamming. (A19, A52). It was brought to the attention of the District Court and the Court of Appeals that the manufacturer's manual for the valve expressly stated that sticking or jamming could be an indication of damage to the valve.

Despite the testimony of engineering experts that a prudent engineer would require such a valve to be opened if it were sticking, the Third Circuit reversed the District Court and considered this fact of notice as unrealistic "hindsight". Almost with disdain, it ignored the unrebutted credible testimony heard and believed by the Trial Court.

The District Court was entitled to draw the strong inference that the shore management knew that the valve was not opened up and that the written report of the shipyard's guarantee engineer that he was told it was "solved" was insufficient to meet the requirement that the valve be opened after jamming. The QUEENY management was on notice from the guarantee engineer's report

and should have insisted on opening the valve. (A54).

The evidence established that such sticking is very critical because of the valve's position just forward and upstream in the steam path from the astern turbine. Yet the Third Circuit approved of Keystone's failure to carry out its non-delegable duty to have the valve opened upon receipt of the reports of sticking. The *PERAMA*, 388 F. 2d 434, 439 (2nd Cir. 1968), *cert. denied*, 393 U. S. 828 (1968). From the standpoint of prudent vessel operations, the action of the Third Circuit is incomprehensible.

The express warning in the manual was clearly not "hindsight" as so cavalierly asserted by the Third Circuit. (A19). It was improper review for the Third Circuit to substitute its own views for the findings and conclusions of the finder of fact. The Trial Court was obviously impressed by the testimony of experts that prudent shore management should have opened up the astern guardian valve when sticking or jamming was discovered.[6]

C. Keystone Was Properly on Notice of Potential Astern Turbine Damage to the EDGAR M. QUEENY Because of Such Damage Discovered on the QUEENY's Sister Ship.

The Court of Appeals misconstrued and misunderstood the well recognized significance and purpose of evidence about damage to the astern turbine of The SPIRIT OF LIBERTY, a sister ship of the QUEENY, discovered during a routine quadrennial opening of the LIBERTY's turbine about one year before the QUEENY's collision with the CORINTHOS. The Court of Appeals failed to understand that the District Court was satisfied by substantial evidence that turbine damage sustained by a sister ship required Keystone to scrutinize more closely the performance data of the QUEENY's *astern turbine*. (A23).

6. Witnesses confirmed without contradiction that the QUEENY's engineers did not open the valve as required by prudence and the manual.

An investigation on the sister ship and the QUEENY would have revealed the damage to the QUEENY's astern turbine and would have provided an opportunity to correct a dangerous and unseaworthy deficiency of the QUEENY's emergency backing power. The QUEENY's propulsion machinery was built by the same manufacturer who built the engines of The SPIRIT OF LIBERTY.

The Court of Appeals again made a serious mistake here. It erroneously concluded that Villaneuva contended the damage to the astern *turbine* of the SPIRIT OF LIBERTY put Keystone on notice of damage to the QUEENY's *astern guardian valve*. The repetition of this definite and egregious mistake reveals a basic misunderstanding of the case and may also again explain the reason for the panel's refusal to treat the LIBERTY's turbine problem and her shortfall of astern RPM's as notice to shore management.

The Court of Appeals also overlooked the clear and unequivocal testimony of Mr. C. C. Williams, the Keystone Vice President in Charge of Operations, that The SPIRIT OF LIBERTY, which *had* performed a crash stop test in 1972, was then only able to obtain 62.5 RPM astern rather than her rated sea trial astern RPM of 76. (1736a) Mr. Williams also admitted that no follow-up or investigation of The SPIRIT OF LIBERTY astern RPM shortfall was ever performed. The District Court was convinced on the foregoing substantial evidence and the reasonable inferences therefrom as demonstrated by the shortfall of RPM on The SPIRIT OF LIBERTY, and the observed astern turbine damage in 1973, that reasonably prudent shore management should have been placed on notice to carefully scrutinize the turbines of sister ships of the LIBERTY which were equipped with the same propulsion machinery.

The finding of the Court of Appeals that there was no relationship between the *astern turbine damage* of the SPIRIT OF LIBERTY and the QUEENY's *astern guardian valve* is a clear and egregious mistake and manifests a failure to understand the case. Moreover, the Court of

Appeals' refusal to hold that turbine damage and reduced astern RPM's on one vessel places an owner on reasonable inquiry to investigate the backing power of a sister ship is an indefensible invasion of the fact finding of the District Court. (See Point II, *infra* pp. 27 to 30).

D. The Third Circuit Was Clearly Erroneous When It Reversed the Trial Court and Permitted Keystone to Ignore a Means of Knowledge of the Vessel's Reduced Backing Power as Reflected in the Data and Information From the RPM Recorder Tapes Notwithstanding the Admission of the Keystone Officers That the Installation of Tapes on the Vessel Was for the Specific Purpose of Monitoring Vessel Engine Performance.

The Court of Appeals summarily rejected without explanation any finding of notice based on the data from the tapes and by so doing improperly substituted its own opinion of what constitutes notice, contrary to the substantial evidence found credible by the trial judge, including the admission of a party. (A23).

The summary rejection by the Court of Appeals of the data from the tapes was clearly erroneous. The District Court properly concluded that the RPM recorder tapes [7] contained reliable and probative information which, if reviewed, would have confirmed that the QUEENY was unseaworthy because of substantially reduced backing power and inability to achieve full astern RPM's as ordered on the night of the collision. (A51, A54, A54).

Adolf Kurz, President of Keystone, and Chester C. Williams, Vice President of Operations each specifically admitted that the purpose of the RPM recorder tapes was to enable shore management to monitor the vessel's engine performance. (Kurz 1393a-1394a; Williams 1726a-

7. Sea Trial tapes, Collision night tapes and the data from tapes for the Intervening Four Years as shown in Dr. Corlett's Report (C-87) on Figure 10.1 (A108) and explained in Appendix 10 of his report printed at 3109a.

1729a, 1819a). Keystone's Assistant Manager of Maintenance and Repair also specifically admitted that the tapes were sent to the office (Vail 1117a) and the Chief Engineer confirmed this (Breton 1658a). Mr. Williams admitted that these tapes were important to Keystone's awareness of the vessel's performance (1819a). The Manager of Maintenance and Repair admitted that it was Keystone's policy promptly to correct any problems with vessel equipment (2568a) and that documents received from vessels should be reviewed if they relate to the performance of engines. (Doerr dep. Aug. 29, 1979, pp. 127-129).

The District Court heard, believed and properly accepted the admissions of Keystone's own officers, i.e., that they had an available means for minute by minute monitoring of the vessel's ahead and astern RPM performance, independent of outside forces (Kurz, *Supra;* Vail 1117a-1118a; 1135a-1136a; Zahar 202a-203a; Breton 1655a-1661a).

Notwithstanding the foregoing, the President and Vice-President in Charge of Operations of Keystone admitted that they did not at any time review or examine, even in a random fashion, the RPM recorder tapes. (728a, 1818a).

The District Court correctly held that the reduced astern power was

> ". . . readily ascertainable because the Queeny is equipped with a data logger system which records on a continuous graph every engine command and the shaft response."[8] (A54, A55).

It is irrelevant whether or not the intervening tapes themselves were in evidence.

Dr. Corlett reviewed the tapes and testified that they

8. Apart from his analysis of the tapes, Dr. Corlett measured the QUEENY's advance and transfer through the water by recognized theories of hydrodynamics and concluded that the QUEENY should have been able to achieve enough backing power from a full astern order to avoid collision.

graphically showed the ahead and astern RPM's ordered and achieved at any time. This data was analyzed and placed on Fig. 10.1 in his report. (C-87; A108, 3109a).

The District Court, having observed and evaluated Dr. Corlett's testimony first hand, concluded that his testimony, report, analysis, calculations (including Fig. 10.1) and conclusions, were reliable and credible and gave great weight to his opinion (A48, A49), and drew reasonable inferences therefrom as to the QUEENY's deteriorated astern turbine power. All the evidence in his report necessary to buttress his opinion was expressly admitted in evidence by the Trial Court. (A103).

Inasmuch as the District Court accepted Dr. Corlett's evidence over that of Prof. Hadler, the QUEENY's expert, the Trial Court's evaluation should not be disturbed. A determination of which expert is the more credible will not be disturbed on appeal for it is not the function of the appellate court to reevaluate conflicting expert testimony. *Northrop Architectural Systems v. Lupton Mfg. Co.*, 437 F. 2d 889, 891 (9th Cir. 1971).

The Appeals Court panel was unjustified in stating that the tapes had "minimum probative value if any." (A23). By so doing, the panel reversed the above uncontradicted facts which were heard and believed by the District Court, including the overwhelming weight of substantial credible evidence in the form of admissions of the three executive officers of Keystone.

During argument on the admissibility of Dr. Corlett's calculations of astern turbine RPM's from the tapes shown in Fig. 10.1 (A108) the Court stated:

> "The Court will receive those calculations and that part of his report that is buttressing his opinion." (A103).

The Court of Appeals is, therefore, just wrong in stating that the data from the intervening tapes was not in evidence (A23).

Whether or not the intervening four years of data from the tapes were admitted in evidence, the District Court was not clearly erroneous in concluding on substantial evidence that the tapes were notice to Keystone and a source of knowledge to its shore management, when it held:

> "If Keystone had been reviewing the graph tapes they would have discovered the problems associated with the functioning of the astern turbine." (A56).

To support the District Court's conclusion of inadequate backing power and notice thereof on the night of the collision, it is not necessary that the intervening four years of tapes be in evidence. The sea trial tapes and the tapes for the night of the collision are admittedly in evidence. (A22; 1395a, 1399a).

There is no question that the data from the RPM tapes constituted an available means of knowledge for monitoring the performance of the astern turbines and that they were sent ashore for that purpose. (Williams 1726a-1729a, 1819a; Kurz 1393a-1394a).

Upon the foregoing, the District Court quite correctly concluded on substantial evidence that examination of the tapes was a reasonable means to ascertain the power deficiency. (A55).

This was a clear demonstration that the District Court understood and recognized the significance of the data from the tapes and by inference Dr. Corlett's opinion as to deterioration. (847a, 849a-850a, 852a, 868a).

The admitted existence of the tapes and the District Court's acceptance of the credible evidence of their reliability is enough under applicable case law (even if the intervening tape data was not in evidence) to show that Keystone had a readily available means of learning about the gravely deficient backing power at any time after the sea trials in 1970 and before the collision in January 1975 and Keystone should, therefore, have had a regular procedure for routine examination of the tapes.

The District Court, in delivering a careful and reasoned judgment based on substantial evidence, held that Keystone should be charged with the knowledge that a reasonable review of the tapes would have revealed.

The Court of Appeals' decision that Keystone is entitled to limit its liability was not only clearly erroneous, but also contrary to the case law in this country and, therefore, this Petition should be allowed.

II. The Decision of the Court of Appeals for the Third Circuit Allowing the Keystone Interests to Limit Their Liability Has So Far Departed From the Accepted Standard of Appellate Review in Limitation Proceedings as to Call for the Exercise of This Court's Power of Supervision.

The Court of Appeals' decision correctly states that it is not permitted to overturn the findings and conclusions of the District Court unless it finds them to have been "clearly erroneous". However, it is clear that the Court of Appeals has made several serious factual mistakes because of significant misunderstandings of the facts (Point I *Supra* pp. 12 to 27). The Court of Appeals for the Third Circuit has also improperly applied the proper standard of review and without justification has invaded the prerogatives of the finder of fact, reversing substantial evidence supporting fact witnesses and the conclusions of experts justifiably accepted by the Trial Court.

The District Court, sitting without a jury was in the unique position to hear and observe 25 fact and expert witnesses presented during this long trial. Based on those observations and the substantial evidence in the record before it, the Trial Court correctly concluded that the EDGAR M. QUEENY was unseaworthy on the night of the collision and her owners knew or should have known of that unseaworthy condition. (A56).

On a number of occasions the Supreme Court has granted a Petition for Certiorari when it believed that the Court of Appeals overstepped its authority in reversing the

fact finder.

In *McAllister v. U. S.*, 348 U. S. 19, (1954) the Supreme Court criticized the manner in which the Court of Appeals applied the "clearly erroneous" standard of review and stated:

> "In relation to the District Court's findings we stand in review in the same position as the Court of Appeals. The question, therefore, is whether the findings of the District Court are clearly erroneous." (p. 20).

In reversing the Court of Appeals and accepting the findings of the District Court, the Supreme Court found there was "substantial evidence" in the record to support the findings of the District Court. It held that the District Court drew "a reasonable inference" from the facts proved. This Court held:

> "Certainly we cannot say on review that a judgment based upon such evidence is clearly erroneous. *Myers v. Reading Co.*, 331 U. S. 447, 485-486; *Tenant, Administratrix v. Peoria & P. U. R. Co.*, 321 U. S. 29. We think it was an allowable judgment of the District Court, and the judgment of the Court of Appeals is reversed." (p. 23).

In *Sentilles v. Inter-Caribbean Shipping Corp.*, 361 U. S. 107 (1959), the Supreme Court again reversed the Court of Appeals and reinstated the jury's conclusion. In so doing, it noted that the purpose of the fact finder is to choose the most reasonable inferences and conclusions from those presented, taking into consideration all the circumstances. This Court reasoned:

> " 'It is not the function of a court to search the record for conflicting circumstantial evidence in order to take the case away from the jury on a theory that the proof gives equal support to inconsistent and uncertain inferences. • • • The very essence of its function is to select from among conflicting inferences and conclusions that which it considers most reasonable. • • •

> *Courts are not free to reweigh the evidence and set aside the jury verdict merely because the jury could have drawn different inferences or conclusions or because judges feel that other results are more reasonable'* [emphasis added] *Tennant v. Peoria & Pekin Union R. Co.*, 321 U. S. 29, 35. The proofs here justified with reason the conclusion of the jury that the accident caused the petitioner's serious subsequent illness. See *Rogers v. Missouri Pacific R. Co.*, 352 U. S. 500 Reversed." (pp. 175, 176).

In *Guzman v. Pichirilo*, 369 U. S. 698 (1962), in reinstating the decision of the Trial Court on the interpretation to be given to ambiguous testimony as to whether or not an operating agreement was a demise charter, the Supreme Court ruled:

> "The determination of the content of ambiguous testimony is for the Trial Court, and such determination can be set aside on review only if 'clearly erroneous.'" (p. 703).

It is well settled that the original trier of fact is in the best position to survey the evidence and draw conclusions regarding the credibility of the witnesses. *Zenith Radio Corp. v. Hazeltine Research, Inc.*, 395 U. S. 100, 123 (1969); *Grove v. First National Bank of Herminie*, 489 F. 2d 512, 515 (3rd Cir. 1973); *Jamison v. Di Nardo Inc.*, 302 F. 2d 27, 29 (3rd Cir. 1962). *See also, Dunn v. Trans World Airlines, Inc.*, 589 F. 2d 408, 414 (9th Cir. 1978); *Smith v. James Irvine Foundation*, 402 F. 2d 772, 774 (9th Cir. 1968), *cert. denied*, 394 U. S. 1000 (1969); *United States v. State of Florida*, 482 F. 2d 205, 208 (5th Cir. 1973); *Dickens v. United States*, 545 F. 2d 886, 890 (5th Cir. 1977).

The District Court's conclusions based on inferences drawn from testimony of fact witnesses, experts, documents or undisputed facts cannot be set aside unless they are clearly erroneous. *United States v. Singer Manufacturing Company*, 374 U. S. 174, 194 (1963); *United States v. State of Florida, supra.*

The Third Circuit has egregiously and mistakenly substituted its own conclusions for those of the Trial Court as fact finder despite the circumstance that the Appeals Panel has shown a manifest lack of understanding of the facts presented and did not hear the witnesses. Moreover, the Court of Appeals based its reversal of the District Court on its own evident misunderstanding of the facts of the case and its failure to comprehend the inferences reasonably and properly drawn therefrom by the Trial Court. *Supra.* pp. 5-12, 17-23, 25, 27.

This appellate decision also promotes intentional ignorance and will undoubtedly encourage a marginal vessel owner simply to send a vessel to sea without monitoring the vessel's performance data. By placing a premium on ignorance, this decision is likely to stimulate significant reductions in the level of safety practices and procedures carried out by shore management.

The Court of Appeals for the Third Circuit has, by this decision, substantially changed the standards of prudent fleet supervision.

CONCLUSION

This case presents the important question of whether a vessel owner is bound by knowledge and information provided by a reliable and probative device admittedly placed on the vessel for the specific purpose of monitoring the vessel's engine performance. It also presents a shocking example of uninformed substitution by the Third Circuit Court of Appeals of its views and its interpretation of technical fact and expert testimony for that of an experienced trial judge.

For the foregoing reasons, this petition for Certiorari should be granted.

Respectfully submitted,

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Attorneys for Petitioner

December 5, 1981

Appendix.

UNITED STATES COURT OF APPEALS
FOR THE THIRD CIRCUIT

Nos. 80-1405, 80-1450, 80-1496

In the Matter of:

The Complaint of Bankers Trust Company As Owner-Trustee and Monsanto Company as Chartered Owner, and Keystone Shipping Co., As Chartered Owner and Operator of the S.S. EDGAR M. QUEENY, for Exoneration From and Limitation of Liability

and

VILLANEUVA COMPANIA NAVIERA, S.A., AMOCO OVERSEAS OIL COMPANY and AMOCO TRANSPORT COMPANY,
Third-Party Plaintiffs,

v.

BETHLEHEM STEEL CORPORATION, GENERAL ELECTRIC COMPANY and THE WILLIAM POWELL COMPANY,
Third-Party Defendants

Bankers Trust Company, Monsanto Company and Keystone Shipping Co.,
Appellants at No. 80-1405

BP Oil Inc. and SOHIO Petroleum Company, Claimants,
Appellants at No. 80-1450

Villaneuva Compania Naviera, S.A.,
Appellant at No. 80-1496

(D. C. Civil No. 75-0364)

Nos. 80-1494, 80-1495, 80-1497

In the Matter of:
Complaint of VILLANEUVA COMPANIA NAVIERA, S.A., Owner of the tank vessel CORINTHOS, for Exoneration From and Limitation of Liability

ROYAL GLOBE INSURANCE COMPANY,
Intervenor Pltf.

NATIONAL GRANGE MUTUAL INSURANCE COMPANY and INSURANCE COMPANY OF NORTH AMERICA

v.

BETHLEHEM STEEL CORPORATION and GENERAL ELECTRIC COMPANY and THE WILLIAM POWELL COMPANY,
Third-Party Defts.

BRITISH PETROLEUM, LTD.; B.P. OIL INC. and SOHIO PETROLEUM COMPANY,
Third-Party Defts.

Bankers Trust Company, Monsanto Company and Keystone Shipping Co.,
Appellants at No. 80-1494

BP OIL INC. and
SOHIO Petroleum Company, Claimants,
Appellants at No. 80-1495

Villaneuva Compania Naviera, S.A.,
Appellant at No. 80-1497

(D. C. Civil No. 75-2110)

APPEAL FROM THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF PENNSYLVANIA

Argued January 13, 1981

Before WEIS and HIGGINBOTHAM, *Circuit Judges*,
DEBEVOISE, *District Judge* *

(Filed May 15, 1981)

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* Honorable Dickinson R. Debevoise, United States District Court for the District of New Jersey, sitting by designation.

OPINION OF THE COURT

A. LEON HIGGINBOTHAM, JR., *Circuit Judge.*

This action is the result of a collision that occurred early on the morning of January 31, 1975 on the Delaware River in Marcus Hook, Pennsylvania. The collision took place when the chemical carrier S.S. EDGAR M. QUEENY (QUEENY), an American steamship, struck the crude oil tanker S.T. CORINTHOS (CORINTHOS), a Liberian steam tanker (owned and operated by Villaneuva Compania Naviera S.A. (Villaneuva)), as the CORINTHOS discharged a cargo of crude oil at the B.P. Oil Inc./Sohio Petroleum Company Terminal (BP/Sohio).[1] It resulted in the loss of 26 lives as well as other personal injuries, extensive damage to the terminal, the destruction of the CORINTHOS, oil pollution in the Delaware River, minor damage to the QUEENY, and damage to neighboring properties. The owners and operators of each vessel subsequently brought suit in admiralty, claiming that the other vessel was exclusively at fault and that they should be exonerated from liability or, in the alternative, that their liability should be limited.

The issues on appeal concern whether the district court erred with respect to the following: first, its denial of the petitions for limitation of liability filed by the owners and operators of the QUEENY (Bankers Trust Company (Bankers Trust), Monsanto Company (Monsanto) and Keystone Shipping Company (Keystone) (collectively the QUEENY INTERESTS)); and, secondly, its ruling that under the preemption doctrine, federal legislation precluded it from holding the owners and operators of either the CORINTHOS or BP/Sohio liable. We will

1. Sohio Petroleum Company is the owner/lessor of a pier and refinery facility at Marcus Hook, Pennsylvania. B.P. Oil, Inc. is the operator/lessee of the facility.

reverse each of those holdings. We find that Keystone's management was not privy to the cause of the accident and that the district court was not preempted from considering the liability of the CORINTHOS and BP Sohio. Moreover, we rule that the alternative finding of the trial court that the CORINTHOS was unseaworthy was in error.[2]

I.

The parties have saturated us with thousands of pages of transcript, hundreds of exhibits, a plethora of expert testimony and extensive briefs. This inundation of evidence may have been necessary for the trial court to make proper findings, but a landlubber's analogy might be more appropriate to put this case in context.

Every novice automobile driver knows that, by the laws of physics, when one seeks to make a U-turn in a small area where the space is less than the circumference required for the full turning arc of the car, the turn can be successfully maneuvered only with a series of forward and backward motions. On a river, where the area is not wide enough for a turn in one maneuver, a 180 degree

2. The parties have attempted to raise on appeal other issues related to findings made by the trial judge, with regard to the liability of BP/Sohio. Those issues are not before us, however, because the trial judge's order did not cover them, and, accordingly there is no final decree for purposes of either U. S. C. § 1291 or 28 U. S. C. § 1292(a)(3). In his order of February 19, 1980, the trial judge dealt only with the petitions for exoneration and limitation of liability filed by Keystone and Villaneuva and not those filed by BP/Sohio. There has been no rule 54b certification pursuant to the Federal Rules of Civil Procedure as to these claims, and no interlocutory decree in admiralty on the record pursuant to 28 U. S. C. § 1292(a)(3). Therefore, there is no appellate jurisdiction for these matters because they are not specifically covered by the formal order of February 19, 1980. See p. 30 *infra*.

turning process is an even more complex maneuver. The "roadbed" of the ship moves with the momentum of the tide. Ships have no brakes which can keep an unanchored vessel at a permanent standstill so as to avoid drifting and possible collisions. Thus, even an experienced captain of a ship must rely on professional pilots whose function on the ship is to aid the captain in making intricate turns, maneuvers and docking. In nautical terminology, we say that the pilot conns [3] the vessel. Tugs are often used to assist him in this process.

The instant case arises because in the process of making a 180 degree turn on the Delaware River, the purportedly experienced pilot of the QUEENY who conned the vessel made tragic errors of judgment. He failed to back and fill [4] enough and to use efficiently the tug that was assisting him in the turn.

Clearly the collision was attributable primarily to the pilot's and the captain's negligence in executing the 180° turn. On this appeal, the parties have not questioned the trial court's finding that the collision was also caused in part by the failure of the owners to correct a purportedly defective astern guardian valve—a vital component of the ship's engine mechanism. The question we must consider is whether the owners have privity or knowledge of this deficiency in the valve.

II. FACTS

The QUEENY is a single screw, steam powered tank vessel of 19,046 gross tons. It is 660.2 feet in length, 90 feet in breadth, and powered by a 15,000 horsepower steam turbine. It was designed and built during the late

3. Conn is a term that refers to the control exercised by one who guides or directs the movements of a ship.

4. Backing and filling is a maneuver used when a ship has to make a difficult turn.

1960's as a multiproduct chemical tanker by the Bethlehem Steel Corporation (Bethlehem) for Monsanto and it was delivered to Keystone as an operator in September of 1970. Pursuant to a subcontract with Bethlehem, its turbine set and controls were supplied by the General Electric Company (GE). GE subcontracted with the William Powell Company (Powell) for the manufacture of a marine astern guardian valve—a valve to be used in the turbine. As will be noted later, the functioning of this valve is of great importance in this litigation.

The CORINTHOS was a single screw, steam powered tank vessel of 30,705 gross tons. It was 723.7 feet in length, 106 feet in breadth and powered by a 17,000 horsepower steam turbine. On January 30, 1975, the CORINTHOS was moored at the BP/Sohio refinery dock on the Delaware River where it was discharging a cargo of crude oil. Across the river, the QUEENY was moored in Bridgeport, New Jersey in order to discharge part of its cargo.

On January 31, 1975, the QUEENY left port headed for the next discharge facility in Paulsboro, New Jersey. She was under the command of Captain Fay Kellog. Pilot Sverre Sorenson was at the conn of the ship. Both Captain Kellog and Pilot Sorenson had performed docking and undocking maneuvers on many occasions aboard the QUEENY. To proceed upstream to the next facility, they knew she had to make a 180° starboard turn. Visability was clear from eight to ten miles. The eastern half of the Marcus Hook channel was closed for dredging operations—reducing the channel width from its standard 800 feet to 400 feet and, therefore, making turning in the river considerably more difficult.

The captain and pilot were on the bridge at the time of the undocking maneuver. To undock, the QUEENY used its main engine and bow thruster, and its rudder was

hard left. The Tug Tanda 12, which had been engaged to help with the undocking, was located on the port bow. Pilot Sorenson was at the Conn and in radio communication with the tug.

When the vessel had cleared the dock, the QUEENY began backing and filling. To do this, it used a series of astern and ahead maneuvers in conjunction with the vessel's rudder, the bow thruster, and the tugboat. This facilitated the starboard turn of the vessel and positioned her to go upstream. Both the captain and pilot knew the eastern half of the channel was closed.

To assist in the turning maneuver, at the early stages, the Tug Tanda 12 pushed at the QUEENY's port bow. Before the attempt to turn was completed, the QUEENY backed and filled at least twice to prepare for it. Tug Tanda 12 was then released from the port bow and instructed to stand by in Paulsboro, New Jersey. Captain Kellog was on the starboard wing of the bridge and Pilot Sorenson was on the port wing.

When the tug was released the vessel's capacity to turn dramatically decreased, but Captain Kellog was not alarmed. He expected Pilot Sorenson to make additional back and fill maneuvers as he had done on many other occasions in similar situations. The QUEENY's forward acceleration, however, actually increased and, consequently, the captain grew apprenhensive, feeling that the QUEENY might not clear the CORINTHOS due to the pilot's failure to continue to back and fill. He voiced his concern about the "closeness" of the situation, but the pilot replied, "Captain, she should make that o.k." Later, Captain Kellog again voiced his concern stating that they should go astern because they would be very close on the maneuver. When Pilot Sorenson did not respond, Captain Kellog became quite alarmed about the proximity of

the QUEENY to the well lighted CORINTHOS and he gave a "full astern" order. The third mate rung up the order on the engine telegraph. It was promptly acknowledged and then executed by the first assistant engineer. Then, Pilot Sorenson ordered a "double jingle." This order was received and promptly acknowledged by the engine room, but it had no effect on the operation of the engines because the first assistant engineer had already opened the throttles as far as he felt they safely could be opened. Accordingly, the rate of the QUEENY's turn to the right was reduced as the propellor responded to the full astern order.

The bow of the QUEENY continued to ease closer to the CORINTHOS, and the pilot, as a result, recommended that the starboard anchor be dropped. It seems that Captain Kellog acquiesced to this recommendation, because he ordered it via his walkie-talkie. No response to Captain Kellog's order was received, however, because the bow lookout, Arvie Harris, stationed at the windlass anchor watch position, had fled the extreme bow in the face of the impending collision.

Shortly thereafter the QUEENY crashed into the CORINTHOS. The initial contact produced sparks as the two ships scraped one another. The shock of this contact caused both ships to roll and pitch, and the vessels collided intermittently. The port fluke anchor of the QUEENY punctured the port shell plating of the CORINTHOS's No. 4 and/or No. 5 cargo tanks, resulting in a series of explosions and then a fire.

The fires and explosions aboard the CORINTHOS were out of control throughout the early morning hours of January 31, 1975, and caused the ship to break in half and sink, which resulted in extensive damage to the dock, oil pollution in the Delaware River, damage to neighbor-

ing properties, and the loss of 26 lives as well as other personal injuries.[5]

Keystone, the owners and operators of the QUEENY, and Villaneuva filed petitions for exoneration from or limitation of liability, Civil Action Nos. 75-364 and 75-2110, pursuant to the Limitations of Liability Act, 46 U. S. C. § 183 *et seq.* This act, in pertinent part, provides as follows:

> The liability of the owner of any vessel . . . for any . . . loss, or destruction by any person of any property, goods, or merchandise shipped or put on board of such vessel, or for any loss, damage, or injury by collision, or for any act, matter, or thing, loss, damage, or forfeiture, done occasioned or incurred, without the privity or knowledge of such owner or owners, shall not . . . exceed the amount or value of the interest of such owner in such vessel, and her freight then pending.

46 U. S. C. § 183(a). Keystone and Villaneuva were damage claimants in each other's limitation proceeding, along with all those who suffered injury or loss.

On the second day of trial, the attorney for Keystone wisely admitted that his client no longer sought exoneration but merely pressed for the limitation of his liability. The district court, sitting without a jury, examined the

5. Several proceedings were instituted relating to this accident. The personal injury and wrongful death actions were settled and dismissed. BP/Sohio filed a products liability action against Bethlehem, GE, and Powell. *See* D. C. Civ. No. 77-2362. The defendants in that suit all have been involved, in one way or another, in designing and constructing the QUEENY, her astern guardian valve and her turbine set and controls. At trial, that action was severed and stayed pending the resolution of the limitation actions. The suit by BP/Sohio against Villaneuva, the owners and operators of the CORINTHOS, was also severed. *See* D. C. Civ. No. 75-1285.

issues raised in the limitation of liability petitions and the contrary claims made by the three major parties. The issue of damages was bifurcated with respect to the question of liability. In a memorandum opinion dated February 19, 1980, the trial court ruled that Keystone's petition for limitation of liability would be denied, and that Villaneuva's petition for exoneration from and limitation of liability would be granted.

III. KEYSTONE'S PETITION TO LIMIT ITS LIABILITY

Since March 3, 1851, federal legislation, under certain circumstances, has permitted a shipowner to limit his liability to the value of the specific ship involved in an accident.[6] Thus, "even where a ship or fleet of ships is owned by a corporation, the privilege of limitation will insulate the remaining corporate assets from claims to which they would otherwise be subject." *See* G. GILMORE & C. BLACK, THE LAW OF ADMIRALTY, 818 (2d ed. 1975) (GILMORE & BLACK). Many assert, as the QUEENY INTERESTS have, that the purpose of the limitation act is to promote competitive United States shipping by reasonably fixing investors' liability to the value of the vessel placed in trade and that "the Act was passed to encourage investment at a time when American shipping was struggling to become commercially competitive and that [that] condition is just as valid in the United States today as it was . . . when the Act became law." Bankers Trust brief at 12.[7] Others assert

6. The Limitation of Liability Act, Chap. XLIII, Thirty First Cong. Sess. 11 Mar. 12, 1851, 9 Stat. 635 (1851), 9 Stat. 635 (1851), (codified at 46 U. S. C. §§ 181-189.)

7. Professors Gilmore & Black observe as follows:

Senator Hamlin of Maine, Chairman of the Senate Committee on Commerce, who introduced the bill, presented it as merely an adoption of English legislation: "Why not give to those

that "[s]ince approximately 1930 the early enthusiasm, both legislative and judicial, for the limitation principal has cooled." GILMORE & BLACK at 821.[8]

Whatever may be the long term trend, in this case, as in most major calamaties, high stakes are involved in the granting or rejecting of Keystone's petitions for limitation of liability. Keystone placed a fund of $11,169,501 in the court representing the limitation value of the

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7. (Cont'd.)

who navigate the ocean as many inducements to do so as England has done? . . . That is what this bill seeks to do, and it asks no more." Of the heart of the bill, sections three and four, he said: "These two sections are substantially the English law." Sen. Rantoul of Massachusetts was willing to give even greater assurance: "They (the British) have made the alteration which we are now asked to make and they have carried it further than this section of the bill carries it." Sen. Davis, from the same state, said: "It is simply placing our mercantile marine upon the same footing as that of Great Britain." 23 Cong. Globe 331-332, 713-720, 776-777, 31st Cong., 2d Sess. (Jan. 25, Feb. 26, March 3, 1851).

GILMORE & BLACK at 819 n. 5.

8. Professors Gilmore & Black have suggested as follows:

There is at least some reason to believe that the judicial attitude in the second half of the twentieth century will be on the whole hostile to the limitation idea, that the early cases will be whittled down if they are not flatly overruled, that the statute, even without further limiting amendments, will be narrowly and not expansively construed. Such an attitude reflects, it is suggested, not so much hostility to the shipping industry as a recognition of the fact that the Limitation Act, passed in the era before the corporation had become the standard form of business organization and before present forms of insurance protection (such as Protection and Indemnity insurance) were available, shows increasing signs of economic obsolescence.

GILMORE & BLACK at 822.

QUEENY while claims at that time were well above $40 million.

In support of its limitation of liability argument, Keystone asserts that the accident was caused solely by the negligent navigation of the QUEENY by Captain Kellog and Pilot Sorenson; that Keystone was without privity or knowledge of these negligent acts; and that, as a consequence, Keystone is entitled to limit its liability to the value of the vessel and freight on the ship at the time of the accident.

Villaneuva and BP/Sohio contend that Keystone is not entitled to have its liability limited because the QUEENY was unseaworthy and that its unseaworthy condition was a contributing cause of the collision. They maintain that the astern turbine on board the QUEENY was defective, and that it prevented the QUEENY from obtaining her full rated backing power prior to the accident. They submit that had the astern turbine functioned properly the QUEENY, notwithstanding the negligent acts of the captain and pilot, would have been able to avoid the collision with the CORINTHOS.

The district court found that the QUEENY's astern guardian valve and astern turbine were defective on the night of the accident and that these defective conditions were a contributing cause of the tragic collision. It ruled that Keystone should have known of this defective condition and held them in privity. Hence, it denied Keystone's petition for limitation of liability.

IV. THE RELATIONSHIP OF THE ASTERN GUARDIAN VALVE TO THE ASTERN TURBINE

Benjamin Franklin once wrote:

For the want of a nail the shoe was lost,

For the want of a shoe the horse was lost,
For the want of a horse the rider was lost,
For the want of a rider the battle was lost,
For the want of a battle the kingdom was lost—
And all for the want of a horseshoe nail.

Similarly many of the parties assert that for the want of a proper functioning astern guardian valve the collision was caused.

Physically, the astern guardian valve is located on the main steam line just outside the steam inlet to the astern element of a low pressure turbine. It is the last valve the steam passes through before it enters the astern turbine. Its purpose is to protect the astern turbine from an accidental opening of the astern throttle valve when the turbine is turning forward RPM.[9] When the valve is open steam passes into the astern turbine and reverses the engine. If steam were accidentally released into the astern turbine while the turbine operated at full speed ahead, it would be seriously damaged.

The valve itself is a disc 5″ in diameter and 6″ high attached to the end of a stem. As the stem is raised or lowered (by a motor or handwheel), it moves up and down inside the valve body. The disc's bearing surfaces, which touch the valve body, are called guide surfaces. At normal room temperature, the clearances between the guide surfaces and valve body are 10-12/1,000ths of an inch. In this case, the disc and valve body were manufactured with the same material (ASTM-2176 grade WC6) (cast steel). Neither was treated to obtain differing degrees of hardness.

The valve operates when steam enters an inlet on its side and exits through a hole in its bottom. As the disc

9. RPM refers to revolutions per minute.

moves up and down, it is kept in position by the guide surfaces which come into contact with the valve's body. The stem obviously does not prevent contact between the valve's disc and body. It simply moves the disc up and down.

The valve's defect was caused by the galling or gouging of its surface due to the rubbing of two metal castings manufactured from the same grade of steel. This rubbing caused the surfaces to weld together, and, consequently, broke off pieces of the metal surfaces. This 'chiseling effect' allowed the steam in the valve to project pieces of metal into the astern turbine where they damaged the turbine's blades. This damage reduced the QUEENY's astern power. Thus, when Captain Kellog ordered full astern, the QUEENY's engines were unable to respond with its former full power.

The QUEENY's turbines were designed for normal sea use. They were guaranteed to produce an astern RPM equivalent to 70% of 109. If undamaged, therefore, they should have responded to the full astern command by producing 76.3 RPM. In fact on the QUEENY's sea trial run, they reached 76 RPM. On the day of the accident, however, they were unable to produce the guaranteed level of astern RPM. Hence, the court below found the QUEENY unseaworthy, and ruled that had the astern turbine functioned properly the collision between the QUEENY and the CORINTHOS would not have occurred.[10]

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10. The trial court adopted the CORINTHOS' extensive proposed finding of fact No. 87, which reads in part:

> If the vessel had achieved 76 RPM's astern on the night of the collision with an undamaged turbine and the RPM's were recorded on the night of the collision, there would have been no collision. (C-343, Line 5).

V. THE VALVE INCIDENT AND ITS LEGAL CONSEQUENCES

In reviewing the district court's finding of liability, the critical question we must address is whether the QUEENY INTERESTS had knowledge and privity of any defect in the astern guardian valve. Even if it is conceded that the valve was defective and that the collision was caused by the valve's defect, this alone does not constitute a basis to deny the QUEENY INTEREST'S petition to limit their liability. To constitute a per se basis to deny their petition, they must have had knowledge and privity of the valve's defect.

The statute provides that the owners' liability shall be limited to the "value of the interest" of the "vessel and her freight" for any act which occurs "without the privity or knowledge" of the owner. 46 U. S. C. § 183(a). In this case, therefore, the magic words are "privity or knowledge," for a shipowner is responsible for unseaworthiness of his vessel only if he has knowledge, or, in the use of ordinary care, should have knowledge of that condition. *Spencer Kellog & Sons, Inc. v. Hicks,* 285 U. S. 502 (1932); *Gibboney v. Wright,* 517 F. 2d 1054 (5th Cir. 1975); *Waterman Steamship Corp. v. Gay Cottons,* 414 F. 2d 724 (9th Cir. 1969); *China Union Lines, Ltd. v. A. O. Andersen & Co.,* 364 F. 2d 769 (5th Cir. 1966), *cert. denied,* 386 U. S. 933 (1967); *The Cleveco,* 154 F. 2d 605 (6th Cir. 1946).

In this respect, corporate shipowners, are held liable for the acts or knowledge of managing officers or supervisory employees. *Coryell v. Phillips,* 317 U. S. 406, 410-412 (1943); *Avera v. Florida Towing Corporation,* 322 F. 2d 155 (5th Cir. 1963); *Complaint of Allied Towing Corp.,* 409 F. Supp. 180, 188 (E. D. Va. 1976), *aff'd,* 580 F. 2d 792 (4th Cir. 1978). Usually, however, they

will not be held liable for the actions of crew members in the navigation or operation of the ship at sea. *In re Black Sea Steamship Company*, 382 F. Supp. 907, 911 (D. C. Canal Zone 1974). To hold Keystone privy, therefore, the evidence must show that some individual at the management level of Keystone had, or should have had, knowledge of the QUEENY's damaged astern guardian valve. BP/Sohio and the CORINTHOS bear the burden of proving negligence or unseaworthiness. Keystone, on the other hand, must demonstrate a lack of knowledge or privity to show that it is entitled to have its liability limited. *Farrell Lines, Inc. v. Jones*, 530 F. 2d 7, 10 (5th Cir. 1976).[11]

Under these precepts of law, what were the facts in this case which would justify the trial courts finding of privity or knowledge?

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11. In the lower court, BP/Sohio argued that there were numerous contributing causes to the collision: (1) the failure of Keystone's management to use due diligence to discover and remedy the damage to the astern turbine which reduced the QUEENY's astern power by 40% and rendered her unseaworthy; (2) Keystone's decision to give the captain the discretion to ignore company instructions to require an anchor watch to maneuver in congested waters—a decision that made it impossible to drop the anchors (which might have prevented the collision); and (3) the pressure placed on Keystone by Monsanto to cut costs which resulted in the failure to use bridge control and the premature relief of the bow detail without the posting of an anchor detail.

The CORINTHOS raised these same points. They also alleged that Keystone (1) failed to instruct the QUEENY's master and officers to use tugs during starboard turning maneuvers in confined or restricted waters; (2) failed to inform the QUEENY's captain and officers that the bow thruster power had been increased by the shipbuilder from 1200 to 1600 amps; and (3) failed to find out why the captain refused to perform a crash stop test and believed such a test would damage the vessel's propulsion system.

VI. THE TRIAL COURT'S FINDINGS

The district court found that the QUEENY's astern guardian valve and astern turbine were defective on the night of the accident and that this defective condition was a contributing cause of the tragic collision. It ruled that Keystone should have known of this defective condition and held them in privity. Thus, it denied Keystone's petition for limitation of liability.

The court below based its conclusion of privity and knowledge on the following findings. First, on or about September 14, 1970, more than four years before this accident and not long after the QUEENY had been delivered by Bethlehem, problems developed with the QUEENY's astern guardian valve. The court held that Keystone had notice of these problems. Second, the court ruled that Keystone would have discovered the defect in the astern turbine had it examined the RPM logger tapes. Third, it found that, in 1973, Keystone was negligent because it failed to determine the cause of the turbine damage on a sister ship of the QUEENY, and relate this information to the earlier problem with the QUEENY's valve. Finally, the court held that the QUEENY INTERESTS had a duty to follow-up on Captain Kellog's March 12, 1972 letter which purportedly revealed concerns about defects to the turbine. These findings of the trial court, of course, must be measured by the traditional standard in admiralty that they will not be set aside unless clearly erroneous. Fed. R. Civ. P. 52(a); *see McAllister v. United States*, 348 U. S. 19, 20 (1954); *SS Amazonia v. New Jersey Export Marine Carpenters, Inc.*, 564 F. 2d 5 (2d Cir. 1977).

A. THE ADVANTAGES OF HINDSIGHT

There is no vision which is as clear as hindsight. Images come into almost perfect focus through the evi-

dentiary microscope of a lawyer's hindsight. After thousands of daily and weekly occurrences of maritime life are discarded, the lawyer can isolate a few incidents for examination with such a microscope to document things such as privity or knowledge. This process proceeds as if a reasonable person had no other responsibilities or phenomena or events to observe other than those incidents now carefully isolated and focused on through this hindsight perspective. If life were so simple, foreseeability under the law would be the equivalent of omniscience.

We feel that the appellees in this case have built such a hindsight microscope slide—one that is patently divorced from reality. Scattered and isolated items taken out of context were presented to the court, and, surprisingly, the trial judge found a nexus of interrelationships to establish privity and knowledge. These findings defy the realities of life—even when recognizing a shipowner's undelegable obligation to correct equipment that is *known* to be defective. The most significant gap which the trial judge failed to appreciate involved a four-and-a-half-year span during which appellants at no time had any realistic notice that the astern guardian valve on the QUEENY was functionally defective.

B. THE MAIDEN VOYAGE

The QUEENY's maiden voyage was made in September of 1970 when, shortly after it was delivered, it traveled from Baltimore to Texas. On that voyage, the astern guardian valve malfunctioned when it either stuck or jammed in the closed position. When this happened, it became impossible for the steam to pass through to the astern turbine.

The valve usually is automatically operated by the limitorque motor—a motor that provides torque to open

or close it. This motor could not move the valve on the QUEENY's initial voyage. Each attempt to do so overloaded the electrical circuit and tripped the circuit breaker. The valve, however, was equipped with a handwheel that could be used to operate it manually. The QUEENY's first assistant engineer, Michael Breton, attempted to turn the handwheel after the malfunction. But he was unable to do so. Breton and Bethlehem's operating engineer, John Jensen, later were able to free the handwheel. They used a wrench (called a "cheater") to give them extra leverage so as to apply excessive force to the handwheel to open the valve.

The instruction manual for the astern guardian valve observes that a "cheater" must never be used on the handwheel. Furthermore, it states as follows:

> Excessive handwheel effort can indicate the following:
>
> > (1) improperly lubricated or damaged valve stem; (2) valve packing gland too tight; (3) improperly lubricated valve; (4) stem nut too tight on valve stem; (5) faulty or damaged valve parts.

Breton and Jensen, however, simply reset the limitorque circuitry to allow the valve to open and shut without further investigating what had caused the initial problem.

The QUEENY INTERESTS were informed of the problems with the valve on September 14, 1970, when the technical assistant to the vice president of Keystone, Samuel Spencer, sent an internal memo to Keystone's president, Adolph B. Kurz. Spencer also notified the Chief Guarantee Engineer, E. L. Insley, at Bethlehem, and Bethlehem listed the valve as an item for repair at the guarantee yard dry docking.

Bethlehem's "guarantee agreement" with Keystone required it to repair or replace any part or system on board the QUEENY that malfunctioned for reasons attributable to the builder. Vessel personnel were to notify both QUEENY management and the builder promptly when guarantee items needed to be repaired. Hence, on September 15, 1970, the day after Keystone learned that the astern guardian valve was sticking, it notified the proper Bethlehem representative of the problem. A Bethlehem Guarantee Engineer, Mr. McKendrick, met the QUEENY at her first northern port of call on September 20, 1970. On September 21, 1970, he reported that the valve was operating properly. At that time, therefore, Keystone had every reason to believe the valve was in working order because Bethlehem reported that it worked properly within only six days of notice of the problem.

The trial court held that the cause of the jamming and sticking of the valve in 1970 was not properly investigated, and that Keystone should have insisted on an inspection of the valve and turbine during the guarantee repair period. Yet, Keystone was told by the experts—Bethlehem, the company which built the ship—that the valve had been fixed, and for the next four-and-a-half years subsequent to this statement, it seemed to perform properly. Under these circumstances, the shipowner should not have been obligated to insist upon an inspection of the valve and turbine during the guarantee period. It makes no more sense to impose such a duty on a shipowner than it would to require a taxicab company to take a transmission apart on its new cab when the car's manufacturer had advised them that the new cab's transmission had been repaired and it worked properly after the original repair.

It is, of course, well settled that a shipowner has a duty to use reasonable means to acquire knowledge cal-

culated to inform him of conditions likely to produce or contribute to unseaworthiness. He must create reasonable procedures for identifying the need for repairs, and relaying reports of ship conditions to shoreside management, *See ARGENT*, 1940, A. M. C. 508 (S. D. N. Y. 1915). He must also enforce employee compliance with those procedures, *The Pennsylvania v. Troop*, 86 U. S. (19 Wall.) 125 (1873); *Avera v. Florida Towing Corporation*, 322 F. 2d 155 (5th Cir. 1963). Finally, he must use those procedures to keep abreast of ship conditions. *Spencer Kellog & Sons, Inc. v. Hicks*, 285 U. S. 502 (1932); *Complaint of Allied Towing Corp.*, 409 F. Supp. 180 (E. D. Va. 1976), *aff'd*, 508 F. 2d 792 (4th Cir. 1978).

In this light, in the instant case we hold, as a matter of law that the trial court erred because the record demonstrates that Keystone made every reasonable effort necessary to assure the valve was properly repaired.

C. THE RPM LOGGER TAPES

Secondly, the court below found that Keystone would have discovered the defect in the astern turbine had it examined the RPM logger tapes which monitor the revolutions per minute of the engine. In so finding, it held that Keystone had notice of a problem with the astern guardian valve, and, therefore, had a duty to monitor the turbine to assure it was unaffected by the earlier difficulties with the valve. The record reveals, however, that the RPM tapes, dating from the sea trials to the night of the collision, were excluded at trial. They were neither marked nor placed into evidence as an exhibit. The trial court admitted into evidence only the sea trial tape, and the tape for the day of the accident. The court did state that it would also consider the opinions testified about in court by Dr. Corlett with respect to the tapes. But, Dr. Corlett's testimony at trial, for the most part,

compared the performance of the QUEENY on the night of the collision with its performance during the sea trials. He nowhere expressed an opinion related to the performance of the QUEENY over her sea life from the time of the sea trials until the accident. We hold, therefore, that since the tapes were not in evidence it was error for the trial court to review that data and to attribute to Keystone the duty to have acquired that knowledge and to have acted upon it. We must note that even if the tapes had been admitted, they would have had minimum probative value if any.

D. PROBLEMS OF A SISTER SHIP

Thirdly, the district court found that Keystone was negligent because it did not properly investigate the cause of the turbine damage on a sister ship of the QUEENY in 1973, which purportedly would have alerted it to a defect in the QUEENY's astern guardian valve. In effect, the court held that due to an allegedly improper repair of another ship's, (the LIBERTY), "turbine," the defect in the QUEENY's "valve" was never found. Yet, the record nowhere indicates that the astern guardian valve on the LIBERTY was damaged in 1973. Nor is there any evidence that personnel on board the LIBERTY had ever experienced a problem with the astern guardian valve similar to the one experienced on the QUEENY.

Nothing in the record, therefore, supports the trial court's ruling that the damage discovered on board the LIBERTY should have caused Keystone to be concerned about damage on the QUEENY. Those attending the LIBERTY had determined that the damage to her turbine was the result of small bits of debris left in the steamline—which was a plausible explanation.[12] And were we to

12. It is not uncommon for such debris to stay in the propulsion system after the construction of a new vessel, and, thereby,

rule that negligence with regard to the repair of one vessel could be imputed to the operation of another ship that is involved in a collision over a year later, we certainly would be extending the notion of foreseeability beyond reasonable limits. Thus, we hold that it was error for the trial court to find Keystone negligent for failure to determine the cause of the turbine damage on the LIBERTY and relate that information to the QUEENY's earlier valve problem on its maiden voyage.

E. CAPTAIN KELLOG'S LETTER

Finally, the trial court found that Keystone should have known of the damaged condition of the QUEENY's turbine because Captain Kellog was reluctant to perform a crash astern test that was not required. The captain did write a letter to Keystone indicating he felt "such a test might damage the intricate and delicate propulsion system" on the QUEENY. But, he had not been ordered to perform the test. Rather, in 1972, Keystone had sent out Master's Circular No. 5565 which stated, in significant part, as follows:

> In general, crash stop data was recorded during Builder's trials before delivery of a new vessel or before redelivery after a major conversion. You will appreciate that an emergency crash stop is a severe exercise on both machinery and hull. It is not desirable to undergo such a strain unnecessarily. Therefore, *where this information developed by the Builder is available from your records, the emergency crash stop need not be repeated.* In this case, make the data readily available for reference.

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12. (Cont'd.)

damage the turbine blades. In 1973, the LIBERTY valve was opened for the first time. Hence, it was reasonable to assume that construction debris had caused the damage.

(emphasis added). Captain Kellog was on board the QUEENY during its sea trials, so he was well aware that this information was available in the ships records.

In any event, the Kellog incident took place in March 1972, about a year and a half after the valve sticking incident in 1970, and there simply is not enough evidence in the record to lead us to the conclusion that Kellog's letter was related to the valve problem, or that it should have led Keystone to the discovery of the problem with the QUEENY's valve.

In conclusion, isolated events, such as those discussed above, over such an extended period of time, do not place a shipowner on notice with respect to his vessel's alleged seaworthiness. In this regard, the courts must consider how many vessel activities are logged and monitored each day with respect to a vessel, let alone a fleet of vessels. The numbers are enormous. We find, therefore, that the separate and distinct events relied on by the trial court are, as a matter of law, not significant enough to support a ruling that Keystone had knowledge or privity of the acts of negligence on board the QUEENY, or her purported unseaworthiness.

VII. THE LIABILITY OF VILLANUEVA

The QUEENY INTERESTS assert that the owners and operators of the CORINTHOS were at fault because they did not inert its tanks. The trial court held that "the absence of inerting systems was a contributing cause of the damages," but it ruled that it would grant Villanueva's petition for exoneration of liability because it was preempted by Congress from finding it unseaworthy.

The record indicates that once an uninerted tanker has discharged a cargo of crude oil, it may be likened to a floating time bomb. Inerting is a process that fills the

cargo tanks of ships—when they are emptied of oil cargo during discharge—with inert gas rather than air which contains oxygen. This process reduces the likelihood of explosion or fire on such vessels because it prevents the build-up of fuel vapor which, when combined with oxygen, explodes when there is an ignition source.

Although the concepts of inerting is not new,[13] the CORINTHOS was not fitted with an inert gas system when it was built in 1963. Villanueva argues that the trial court was precluded from requiring it to have retro-fitted the CORINTHOS with an inert gas system prior to the accident of January 31, 1975 because Congress in October of 1978 enacted a specific schedule for the inerting of vessels like the CORINTHOS that does not require them to be inerted until June 1, 1983. The Port and Tanker Safety Act of 1978, Pub. L. 95-474, 92 Stat. 437, (codified at 33 U. S. C. §§ 1221-1232; 46 U. S. C. §§ 214, 391(a)) (the 1978 Act). Moreover, Villanueva maintains that the trial court improperly found that the CORINTHOS was unseaworthy since as of January 31, 1975, it had complied with all of the existing international treaties and American legislation prescribing tank vessel equipment for the prevention of explosion and fire. Lastly, it contends that, in any event, an inert gas system would have been unable to prevent the explosions that followed the collision.

> In relevant part, the district court held as follows: Though in 1975, no law required the inerting of cargo tanks on vessels the size of the CORINTHOS, we believe that at that time, the custom of the industry was insufficient to satisfy common law standards of care. However, the CORINTHOS interests are fortunate that Congress has entered this field of law,

13. Chevron inerted some of its ships as early as 1925.

thereby preempting the Courts from deciding this issue.

It was, however, a misapplication of the preemption doctrine for the district court to hold that it was preempted from considering a conflict between the federal legislature and the federal judiciary. The preemption doctrine, by definition, delimits the relation between the federal legislature and the states. Where the federal legislature regulates a particular area of conduct or activity with an eye toward maintaining uniformity among the states, no state may enact measures which circumvent the federal intent. *Gibbons v. Ogden*, 22 U. S. (9 Wheat.) 1 (1824).

The federal judiciary, on the other hand, is vested with the authority to interpret the acts of the legislature and executive within the limits prescribed by the Constitution. Within these limits, federal courts are not preempted from interpreting statutes, reviewing executive orders, or establishing common law standards of care merely because another branch of government has entered and regulated a sphere of conduct. And, certainly, in this circuit, industry standards and practices normally establish only minimal requirements, and do not create immunity from liability. Indeed, in *Voegele Company, Inc. v. OSHRC*, 625 F. 2d 1075, 1078 (3d Cir. 1980), we observed that

> other courts have evaluated the custom and practice of the industry as one aspect of the reasonable person test. These courts have refused to limit the reasonable person test to the custom and practice of the industry because "[s]uch a standard would allow an entire industry to avoid liability by maintaining inadequate safety . . . ." *General Dynamics v.*

> *OSHRC*, 599 F. 2d 453, 464 (1st Cir. 1979). We find this policy reason for not making industry standards determinative to be quite compelling. *See Cape & Vineyard Div. v. OSHRC*, 512 F. 2d 1148, 1152 (1st Cir. 1975) (in context of § 1910.132(a), "[t]here may . . . be instances where industry practice fails to take reasonable precautions against hazards generally known in the industry; in such event it may not be unfair to hold the employer to a standard higher than that of actual practice."); *Brennan v. Smoke-Craft, Inc.*, 530 F. 2d 843, 845 (9th Cir. 1976); *American Airlines, Inc. v. Sec. of Labor*, 578 F. 2d at 41.

We hold, therefore, that in precluding itself from considering the legislation in question in this case, the court below was in error. Furthermore, we rule that the district court's alternative finding that the CORINTHOS was unseaworthy was improper for the reasons that follow.

On October 17, 1978, Congress enacted the 1978 Act. This Act makes provisions for the inerting of existing tank vessels of the type, capacity, age and size of the CORINTHOS. In Section 391(a)(7)(f), it states that:

> an existing crude oil tanker of 20,000 deadweight tons or above, [should] not later than June 1, 1983, be equipped with an inert gas system.

The statutory history of this piece of legislation reflects an attempt to balance the various interests concerned with the safety of tanker operations. The House Report on the Port and Tanker Safety Act, H. R. REP. No. 95-1384-PART 1, 95th Cong. 2d Sess., *reprinted in* [1978] U. S. CODE CONG. & AD. NEWS 3270, 3271, states as follows:

> In considering corrective legislative action, the committee has kept itself informed of the ongoing activity in the international arena, particularly in the Inter-Governmental Maritime Consultative Organization (IMCO); and H. R. 13311 reflects, in part, certain requirements accepted internationally, as developed in the recent meeting of the International Conference on Tanker Safety and Pollution Prevention, held in London in February, 1978.

The 1978 Act. Further, the Senate Report on a related statute, the Port and Waterways Safety Act, S. REP. No. 2, 92d Cong. 2d Sess. 426, *reprinted in* [1972] U. S. CODE CONG. & AD. NEWS 2766, 2783, declares that

> [t]he committee fully concurs that multilateral action with respect to comprehensive standards for the design, construction, maintenance and operation of tankers for the protection of the marine environment would be far preferable to unilateral imposition of standards. However, standards are slow in coming from the multilateral forums . . .
>
> [Therefore] while the committee remains committed to the proposition that multilateral action in this area is preferable, it is not willing to sacrifice the objective of protection of the marine environment on the altar of that principal. Much more rapid and comprehensive action will be required if the United States is to continue to rely on multilateral forums. However, in the light of the preference for multilateral action shared by the administration and by the committee, provisions were adopted I. R. § 40 which attempted to resolve this dilemma, primarily thru the use of a deferral procedure.

In this light, the 1978 Act was a legislative response to a Presidential Message sent to Congress on March 17, 1977—a message with regard to the marine transportation of oil. In this message, President Carter recommended reforms in ship construction and equipment standards (including the requirement of inert gas systems on oil tankers over 20,000 deadweight tons). He hoped that these requirements would be "fully effective within five years." 123 CONG. REC. 7931 (1977).

Notwithstanding the President's hopes for the future, however, on January 31, 1975, the day of the collision, the CORINTHOS was in compliance with the existing international treaties, and United States legislative and regulatory requirements concerned with fire fighting and explosions. It complied with all the fire fighting and anti-explosion provisions of the Safety of Life at Sea (SOLAS) Conventions of 1948 and 1960.[14] Furthermore, in accordance with the SOLAS requirements, her owners had ensured not only that the vessel was equipped for fire fighting, but also that her crew was properly trained to fight fires. Finally, the CORINTHOS was also recognized by the American Bureau of Shipping (ABS) [15] to be seaworthy. Thus, we find it was clearly erroneous for the lower court to rule that the CORINTHOS was unseaworthy.

Over the years a series of laws and regulations have been enacted with regard to tanker safety so as to phase in equipment requirements for ships. Congress has determined after considering many factors, including ship-

14. *See* Safety of Life at Sea Convention, June 10, 1948, 3 U. S. T. 3450, T. I. A. S. No. 2495; and Safety of Life at Sea Convention, June 17, 1977, 16 U. S. T. 185, T. I. A. S. No. 5780.

15. The ABS is recognized by the United States Government as a government agency authorized to inspect and classify tank vessels 46 U. S. C. § 881.

yard capacity and the available technology, that five years should be allowed before the retrofitting of tankers over 20,000 deadweight tons becomes mandatory. Were we to impose liability on vessels before this time period is up, the Congressional timetable would be rendered useless. Hence, in this instance, we will be guided by the federal legislation developed by Congress.

VIII.

For the reasons stated above, we will reverse the district court with respect to its denial of the petition of limitation of liability to Keystone. Moreover, we will hold that the preemption doctrine is not applicable as to Villanueva. To the extent that the court made an alternative finding to deny Villanueva's petition for limitation of liability because it failed to use an inert gas system on the CORINTHOS, we will rule that the alternative finding was error as a matter of law. Of course, in admiralty, appeals from interlocutory decrees are permissible as a matter of statutory right.[16] In this case, there was no decree entered by the trial court as to the issues raised in the appeals filed by B.P./Sohio in 80-1450 and 80-1495, and, therefore, the appeals in those cases must be dismissed for lack of appellate jurisdiction. We remand the case to the trial court for further proceedings consistent with this opinion.

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16. *See* 48 U. S. C. § 1292(a)(3). *See also* 9 MOORE'S FEDERAL PRACTICE § 110.19[3], and 7B MOORE'S FEDERAL PRACTICE § 1292(a)(3).

UNITED STATES COURT OF APPEALS
FOR THE THIRD CIRCUIT

Nos. 80-1405, 80-1450, 80-1496

In the Matter of:
The Complaint of Bankers Trust Company, et al.
and Villaneuva Compania Naviera, S.A., et al.
v. Bethlehem Steel Corporation, et. al.

Bankers Trust Company, et al.,
Appellants at No. 80-1405

BP Oil Inc., et al.,
Appellants at No. 80-1450

Villaneuva Compania Naviera, SA.,
Appellant at No. 80-1496

(D.C. Civil No. 75-0364)

Nos. 80-1494, 80-1495, 80-1497

In the Matter of:
Complaint of Villaneuva Compania Naveria, S.A.,
etc., et al.; National Grange Mutual Insurance
Company v. Bethlehem Steel Corporation, et al. v.

British Petroleum, Ltd., et al.
Bankers Trust Company, et al.,
Appellants at No. 80-1494

BP Oil Inc., et al.,
Appellants at No. 80-1495

Villaneuva Compania Naviera, S.A.,
Appellant at No. 80-1497

(D. C. Civil No. 75-2110)

ORDER AMENDING OPINION

Present: WEIS and HIGGINBOTHAM, *Circuit Judges*, and DEBEVOISE, *District Judge* *.

Banker's Trust Company, as owner-trustee, has filed a motion for clarification of judgment—as to whether our reversal of the denial of limitation of liability to "Keystone" included also a reversal as to the denial of the limitation of liability to Banker's Trust Company and Monsanto Company. In our opinion at p. 29, we used the term "Keystone" in a collective sense as it was used in the joint brief of Banker's Trust, Monsanto Company and Keystone Shipping Company, wherein they stated that the three entities would "hereafter collectively [be referred to as] Keystone." Brief, p. 4. To eliminate any possible ambiguity.

IT IS ORDERED that the Slip Opinion of this Court filed May 15, 1981 be amended as follows:

Page 4, paragraph 2, line 6, "Keystone Shipping Company (Keystone)" should be deleted and

"Keystone Shipping Co. (Keystone Shipping)" be substituted;

Page 4, paragraph 2, line 7, the words "or Keystone" should be inserted after the words QUEENY INTERESTS.

Page 10, Title to Section III, "KEYSTONE'S PETITION TO LIMIT ITS LIABILITY" should be deleted and

* Honorable Dickinson R. Debevoise, United States District Court for the District of New Jersey, sitting by designation.

"THE QUEENY INTERESTS' PETITIONS TO LIMIT THEIR LIABILITY"

be substituted.

PAGE 29, VII., the first full sentence of that paragraph which reads "For the reasons stated above, we will reverse the district court with respect to its denial of the petition of limitation of liability to Keystone" should be deleted and the following sentence substituted:

> For the reasons stated above, we will reverse the district court with respect to its denial of the petition of limitation of liability to Bankers Trust Company, Monsanto Company and Keystone Shipping Co.

By THE COURT:

A. LEON HIGGINBOTHAM
Circuit Judge

Dated: July 24, 1981

IN THE
UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF PENNSYLVANIA

In the Matter of
The Complaint of Bankers Trust Company as Owner-Trustee and Monsanto Company as Chartered Owner, and Keystone Shipping Co., as Chartered Owner and Operator of the SS EDGAR M. QUEENY, for Exoneration from

C. A. No. 75-364

In the Matter of
The Complaint of VILLANEUVA COMPANIA NAVIERA, S.A., Owner of the tank vessel CORINTHOS, for Exoneration from and Limitation of Liability

C. A. No. 75-2110

MEMORANDUM OPINION AND ORDER

WEINER, J. FEBRUARY 19, 1980

These admiralty actions arise out of a collision which occurred during the early morning hours of January 31, 1975, on the Delaware River at Marcus Hook, Pennsylvania. The vessels involved were the SS Edgar M. Queeny ("Queeny"), an American steamship, and the S.T. Corinthos ("Corinthos"), a Liberian steam tanker. At the time of the collision, the Corinthos was moored, starboard side, to the BP Oil Inc/Sohio Petroleum Company dock at Marcus Hook, Pennsylvania in order to discharge her cargo of crude oil. The collision and the resulting explosions caused extensive damage to the dock,

the destruction of the Corinthos, oil pollution of the Delaware River, minor damage to the Queeny, damage to neighboring properties, and tragic loss of 26 lives and other personal injuries.

As a result of this incident, numerous proceedings were instituted. The personal injury and wrongful death actions were settled and dismissed, and therefore shall not be discussed in this opinion. A products liability action was filed by BP Oil Inc. and Sohio Petroleum Company against Bethlehem Steel Corporation, General Electric Company and The William Powell Company. (See C. A. 77-2362). These defendants, collectively referred to as the products or third party defendants, participated in one aspect or another in the design and construction of the Queeny, her turbine set and controls, and the astern guardian valve. At the time of trial, the products liability action was severed and stayed pending the resolution of the limitation actions.[1] Also severed at the time of trial was the action of BP Oil, Inc./Sohio Petroleum Company against Villanueva Compania Naviera, S.A., et al., owner of the Corinthos. (See C. A. No. 75-1285).

In the instant limitation actions, the issue of damages was bifurcated from the issue of liability, and the cases then proceeded to trial before the court sitting without a jury. On the second day of trial, James F. Young, Esquire, attorney for the Queeny interests admitted that his client no longer sought exoneration. (N.T. Pgs. 38-39, July 19, 1979). Accordingly, our opinion will address the questions of whether the Queeny interests are entitled to limit their liability and whether the Corinthos and BP Ohio Inc./Sohio Petroleum Company interests can be exonerated from or limit their liability. For ease

1. The products liability action was severed on the granting of a motion of the products liability/third party defendants.

of understanding, our Findings of Fact, Discussion, and Conclusions of Law shall be recited in narrative form rather than in separately numbered paragraphs.

II

The SS Edgar M. Queeny, Official Number 528567, is a single screw, steam powered tank vessel of 19,046 gross tons. She is 660.2 feet in length and 90 feet in breadth. She is powered by a 15,000 shaft horsepower steam turbine. She was designed and built as a multi-product chemical tanker by the Bethlehem Steel Corporation ("Bethlehem") during the mid-to-late 1960's for the Monsanto Chemical Co. The Queeny's turbine set and controls was designed and built by the General Electric Company ("G.E.") pursuant to a subcontract with Bethlehem. G.E. in turn, subcontracted with The William Powell Company ("Powell") for the manufacture of a valve known as a Marine Astern Guardian Valve, to be used in the turbine.

The Corinthos, Official Number 1916, was a single screw, steam powered tank vessel of Liberian registry of 30,705 gross tons. She was 723.7 feet in length and 106 feet in breadth. She was powered by a 17,000 horsepower steam turbine.

The Corinthos moored at the BP Oil, Inc. refinery dock in Marcus Hook, Pennsylvania at approximately 1500 hours (3:00 p.m., Eastern Standard Time) on January 30, 1975 and began discharging its cargo of crude oil. The Queeny moored across the river at the Monsanto Chemical Co. dock at Bridgeport, New Jersey at approximately 1248 hours (12:48 p.m., Eastern Standard Time) on January 30, 1975, in order to discharge part of its cargo.

At the time of docking, the Queeny was under the command of Captain Fay Kellog with Sverre Sorensen at

the conn [2] serving as the pilot. Both Captain Kellog and Pilot Sorensen were familiar with the Queeny having participated in her docking and undocking maneuvers many times. At approximately 2300 hours (11:00 p.m., Eastern Standard Time) the vessel began preparations to depart Bridgeport, New Jersey and proceed to Paulsboro, New Jersey. As part of these preparations, the Third Mate, Robert Downs, and an engineer tested the engine order telegraph at the bridge and engine room locations, the steering gear, the bow thruster, and synchronized the wheelhouse, chartroom and engine room clocks. The equipment which was tested was found in good operating condition.

Since the Queeny was moored port side to the pier, it was necessary for it to make a 180° starboard turn upon leaving the dock in order to proceed upstream to the next discharge facility at Paulsboro, New Jersey.

At approximately 0006 hours (12:06 a.m., Eastern Standard Time) on January 31, 1975, the Queeny departed the Monsanto terminal. Its draft at that time was 36 feet forward and 36 feet 10 inches aft. The weather was clear and cold with visibility of 8-10 miles. The tide was flooding with a current of about 1.5 to 2.0 knots and the eastern half of the Marcus Hook channel was closed for dredging operations. The dredging operations reduced the channel width from its normal 800 feet to 400 feet. The "Local Notice to Mariners" required vessels to proceed up the western half of the channel.

During the undocking maneuver, the master and pilot were on the bridge; the third mate, Robert Downs, was manning the engine order telegraph; and the quartermaster, Daryl Sutton was at the helm. In the engine room at this time were the first assistant engineer, George Zahar, at the engine control with third assistant engineer, J. King;

2. Conn is a nautical term meaning control of the ship.

and engineman, J. Tomczak. At the forecastle docking station were Michael Casey, first mate; and Arvie Harris, able seaman; along with several other crew members. At the after docking station was chief mate, Lee Woodward, with various other members of the ship's crew assisting to undock the vessel.

In manuevering from the dock, the Queeny used its main engine and bow thruster, and had its rudder hard left. The Tug Tanda 12, which was engaged to assist with the undocking, was positioned on the port bow and was in radio communication with Pilot Sverre Sorensen who was at the conn. Both anchors on the Queeny were ready to let go, to the degree that it was necessary only to remove the riding pawl and disengage the braking mechanism.

At the time of letting go the lines, prior to departing, Pilot Sorensen made a safety call on Channel 13 of the VHF stating that the Queeny was preparing to leave the dock at Monsanto. Once the vessel was clear of the dock and was proceeding into the river, a second safety call was made. Also at that time the Queeny began backing and filling, using a series of astern and ahead maneuvers in conjunction with the ship's rudder, the bow thruster, and the tug boat to facilitate the starboard turn of the vessel to position her to head upriver. As she was heading into the channel both Pilot Sorensen and Captain Kellog were aware that the eastern half of the channel was closed.

At about 0010 hours (12:10 a.m., Eastern Standard Time), Tug Tanda 12 was pushing the port bow of the Queeny to assist the ship in the turning maneuver. At about that time, Pilot Sorensen came into radio contact with Captain William Kegel, Master of the upbound S.S. Pennsylvania Sun in order to discuss the Queeny's intentions. During this time, the bow thruster was on

right thrust and the Queeny's engines were placed on half ahead with rudder hard right. In the period of time between 0010 and 0022 hours, the Queeny backed and filled approximately twice in order to facilitate its turn.

Located in the river approximately 1060 feet from the Monstanto dock and 1,440 feet from the channel edge is anchor buoy D. At about 0022 hours, the Queeny approached buoy D, said buoy being located about 30-35 yards from the port bow, bearing well to the left of the bow. Also at that time, the Tug Tanda 12 was released from the port bow and was instructed to stand by at Paulsboro, New Jersey. Captain Kellog was on the starboard wing of the bridge and Pilot Sorensen was on the port wing.

Though the rate of swing materially decreased upon the release of the tug, Captain Kellog felt no cause for concern because he expected Pilot Sorenson to back and fill additionally as he had done on other occasions in that same turn across the river or in similar maneuvers. However, as the rate of swing decreased, the Queeny's forward acceleration increased.

At this point, Captain Kellog became apprehensive that the Queeny would not clear the Corinthos because of Pilot Sorensen's failure to continue to back and fill, and because of the decrease in the rate of turn. Though Captain Kellog voiced his concern about the "closeness" of the situation, Pilot Sorensen replied, "Captain, she should make that O. K", or words to that effect.

Shortly thereafter; Captain Kellog again voiced his concern to Pilot Sorensen, stating: "Captain, I think we better go astern because we will be very close on this maneuver", or words to that effect. Captain Kellog received no response to his statement. He noted that Pilot Sorensen as engaged in a radio exchange with Captain Kegel of the S.S. Pennsylvania Sun.

Captain Kellog became concerned with the proximity of the Queeny to the well lighted Corinthos, and he ordered full astern. That order was rung up on the engine telegraph by Third Mate Downs. The full astern order was promptly acknowledged by the First Assistant Engineer. George Zahar, who then executed the order.

Shortly thereafter, Pilot Sorensen ordered a "double jingle" which order was received and promptly acknowledged by the engine room. The order had little impact on the operation of the engines in that Mr. Zahar had already opened the throttle as far as he thought could be safely done. The rate of the Queeny's turn to the right was reduced as the propeller responded to the full astern order.

As the bow of the Queeny continued to ease closer to the Corinthos, Pilot Sorensen recommended that the starboard anchor of the Queeny be dropped. Captain Kellog apparently acquiesced in that he gave that order via his walkie talkie. No response was received because Arvie Harris, the Bow Lookout and the only person stationed at the windlass anchor watch position, had fled the extreme bow, seconds before, in the face of an impending collision.

Moments later, the Queeny came into contact with the Corinthos. The first contact produced sparks as a result of scraping between the two vessels. Due to the shock of the initial contact and the ships' rolling and pitching, there was an interval of intermittent non-contact and contact. It was during the subsequent contacts that the port fluke anchor of the Queeny punctured the port shell plating of the No. 4 and/or No. 5 cargo tanks of the Corinthos. During this time period, there was a series of explosions, followed by a conflagaration.

Immediately after the collision and first explosion, third mate Downs instinctively rung up "Stop" on the

engine telegraph. Shortly thereafter, Captain Kellog noted that the tachometer indicated 0 RPM's and called to Mr. Downs for full astern. That order was executed but not without a degree of confusion.

Captain Kellog, in an effort to emphasize the order, took the bridge telegraph control handle and signalled what he believed to be "Full Astern." Inadvertently, the telegraph was moved to "Bridge Control" following which the First Assistant Engineer called the bridge by telephone to confirm the request. Failing to receive a response from the bridge, the engineer moved the throttle control selector to the "Bridge Control" position. After some confusion, the bridge selector switch was moved from "Bridge Control" to "Full Astern", which signal was received and responded to by the engine room. The Queeny's propeller then began to turn in reverse.

Efforts to back the Queeny away continued until 0041 hours, at which time the Queeny pulled clear, and was able to proceed "full ahead" away from the burning Corinthos. While the Queeny headed downriver toward an anchorage area, its crew was engaged in extinguishing a fire on the Queeny's forecastle head.

At approximately 0100 hours (1:00 a.m., Eastern Standard Time), the Queeny anchored at a position close aboard buoy C of the Sun Oil dock. At about 0305 hours, she began to heave anchor and shifted to another anchorage which was completed at about 0345 hours when the Queeny safely anchored.

Meanwhile, the fires aboard the Corinthos continued to burn out of control through the early morning hours of January 31, 1975. During the course of the firefighting activities, the Delaware River was intermittently opened and closed to traffic as the danger of additional fires fluctuated.

Eventually, the fires and explosions on board the Corinthos caused that ship to break in half and to immediately sink near by the BP dock.

III

Limitation and/or exoneration of a vessel owner's liability is provided for in Title 46 of the United States Code, Section 181 *et. seq.* The section pertinent to the issues in this case in Section 183(a), which in relevant part, provides:

> "The liability of the owner of any vessel . . . for any . . . loss, or destruction by any person of any property, goods, or merchandise shipped or put on board of such vessel, or for any loss, damage or injury by collision, or for any act, matter, or thing, loss, damage, forfeiture, done or occasioned, or incurred without the privity or knowledge of such owner or owners shall not, . . . , exceed the amount or value of the interest of such owner in such vessel, and her freight then pending."

The analysis of whether the Queeny interests are entitled to limit their liability involves a two-step process. First, we must determine what acts of negligence or conditions of unseaworthiness caused the accident. Second, we must determine whether the shipowner had knowledge or privity of those same acts of negligence or conditions of unseaworthiness. *Farrell Lines, Inc. v. Jones,* 530 F. 2d 7, rehearing denied, *African Neptune,* S. S., 532 F. 2d 1375 and *Farrell Lines, Inc. v. Jones,* 532 F. 2d 1935 (5th Cir. 1976). Negligent actions or unseaworthy conditions of which the vessel owner has knowledge or privity will trigger the denial of limitation. *Wyandotte Transporta-*

tion Co. v. United States, 88 S. Ct. 379, 389 U. S. 191, 19 L. Ed. 2nd 407 (1967). Moreover, it is settled that the claimants bear the initial burden of proving negligence or unseaworthiness while the Queeny interests bear the burden of proving lack of privity or knowledge. *Farrell Lines, Inc. v. Jones, supra.*

The parties do not dispute that the predominating cause of this disaster was Pilot Sorensen's failure to properly execute the starboard turn into the Marcus Hook channel due to his navigational error. In addition, it is clear that navigational error on the part of the crew generally occurs without the privity or knowledge of the shipowner, and is not attributable to an absent owner for purposes of limitation of liability. *Tittle v. Aldacosta,* 544 F. 2d 752, rehearing denied, 546 F. 2d 906, 907, rehearing denied 582 F. 2d 12 (5th Cir. 1977).

IV

The claimants in this case however, have argued and presented voluminous testimony and exhibits to the effect that other acts and/or conditions of which the Queeny interests had knowledge or were privy to contributed to the accident.

BP Oil, Inc. and Sohio Petroleum Co. contend that contributing causes of the collision were:

(1) The failure of shoreside management to use due diligence to discover and remedy the damage to the astern turbine which reduced the Queeny's astern power by 40% and rendered her unseaworthy;

(2) The commitment by management of discretion to the master to disregard company instructions requiring an anchor watch while maneuvering in congested waters which precluded the dropping of the anchors, which could have prevented the collision; and

(3) The continued pressure of Monsanto on Keystone to cut costs, which resulted in the failure to use the bridge control and premature relief of the bow detail without posting an anchor detail.

The Corinthos interests raise the same three points and allege as other contributing causes of the collision:

(1) The failure of shoreside management to instruct the master and officers of the Queeny to use tugs throughout any starboard turning maneuver in confined or restricted waters because of the Queeny's inability to properly turn starboard;

(2) The failure of shoreside management to instruct the master and officers of the Queeny that the bow thruster power had been increased by the shipbuilder from 1200 to 1600 amps; and

(3) The failure of shoreside management to inquire into

(a) The reason the master refused to perform a crash stop test, and into

(b) The master's apprehension that such a test would damage the vessel's propulsion system.

V

After review of the evidence we conclude that the Queeny interests are not entitled to limit their liability. Factors other than navigational error, to which they were privy or had knowledge, contributed to the collision.

The issue which dominated much of the claimants case was the alleged defective condition of the astern turbine and the astern guardian valve. They introduced evidence which established that the valve and turbine were in a damaged condition and were contributing causes

of the collision. The claimants contended that if the astern turbine performed properly on the night of the collision, the Queeny would have been able to stop prior to contacting the moored Corinthos.

The turbine set for the Queeny was supplied to Bethlehem Steel Corp. by General Electric, who in turn had selected the William Powell Company to supply the astern guardian valve.

The astern guardian valve is physically located on the main steam line just outside the steam inlet to the astern element of the low pressure turbine. It is the last valve the steam passes through before entering the astern turbine. Its purpose is to guard the astern turbine from an accidental opening of the astern throttle valve while the turbine is turning forward RPM's.

When the astern guardian valve is opened, steam will pass into the astern turbine and reverse the engine. If steam was accidently released into the astern turbine while it was at full speed ahead, the turbine would be severely damaged.

The basic valve is a disc, 5″ in diameter and 6″ high, which is attached to the end of a stem. The disc moves up and down inside the valve body as the stem is raised or lowered by operation of a motor. The stem also can be operated by a hand wheel. The bearing surfaces of the disc, which touch the valve body are referred to as the guide surfaces.

The clearances between the guide surfaces and the valve body, at normal room temperature, is 10-12/1,000ths of an inch, as designed.

The disc and valve body were both manufactured of the same material, which was grade ASTM-217 (grade WC6) cast steel. Neither the disc nor the body was specifically treated to obtain differing degrees of hardness.

The operation of the valve is as follows. Steam enters the valve through an inlet in its side and exits through

a hole in the bottom of the valve. When the valve is open the disc is lifted to partially clear the inlet at the side and open the hole in the bottom. When closed, the valve seats on the bottom of the body, closing the exit hole. On the inside of the valve body, the inlet opening presents a sharp edge past which the guide surfaces must travel on opening or closing. As the disc travels up and down, it is held in position by the guide surfaces which contact the body of the valve. The stem does not provide guidance to protect against contact between the valve disc and valve body, but merely moves the disc up and down.

VI

The defect in the astern guardian valve was the galling or gouging of its surface, caused by the rubbing of the two metal castings manufactured from the identical grade steel. As the surfaces rubbed together, the effect was a welding together of the surfaces followed by the chiseling free of pieces of metal. The continued operation of the system, caused larger pieces of metal to break free which metal pieces were then projected into the astern turbine by the passing steam. The metal pieces damaged the turbine's blades. The damage to the astern turbine's blades reduced the Queeny's astern power.

The significance of the reduced astern power is manifest. When Captain Kellog ordered full astern in face of the impending collision, the Queeny's engines did not properly respond to the command. The turbines of the Queeny were designed for normal sea use and had been guaranteed to run at astern RPM equal to 70% of 109,[3] which is 76.3 RPM. In an undamaged condition, the Queeny's astern turbine would have responded to the full astern command by producing 76.3 RPM. On the Queeny's sea trial run, it achieved astern power of 76

3. 109 R.P.M. is the full ahead rating of the turbines.

RPM. However, on the night of the collision, the astern turbine did not produce the guaranteed level of astern RPM's. It is clear that the condition of the Queeny's astern turbine rendered her unseaworthy.

Moreover, the expert of the Corinthos interests established that if the Queeny's astern turbine functioned properly, the Queeny would not have collided with the Corinthos.

To that effect, the Corinthos interests' finding of fact # 87 is accepted and adopted by this Court. It reads as follows:

> "87. Dr. Corlett reconstructed the events of the night of the collision to confirm that the Queeny: (a) If navigating with a damaged astern turbine and the slow rate of change of recorded RPM on the night of the collision from half ahead to full astern (with all other conditions being the same as on the night of the collision), she would have collided with the Corinthos. His findings precisely followed the facts of the collision which actually took place that night. (C-343, Line 1) [Dr. Corlett's Matrix on the Court Room Easel]. (b) If all other conditions were the same as on the night of the collision, but with the astern turbine undamaged and 76 RPM's astern recorded at the rate of change recorded on the official Sea Trial Tape, there would have been no collision. (C-343, Line 2). See also, (Line 4 of C-343) where it is again demonstrated that undamaged turbine permits the vessel to avoid collision where the vessel achieved 76 RPM astern at the rate of change recorded at sea trials: (c) Again, assuming that all other conditions were the same as on the night of the collision, but with the astern turbine as damaged and that only 70 RPM's

astern were recorded showing a rate of change recorded on the RPM tape as shown on the night of the collision, there would have been a collision. (C-343-Line 3). Thus, on the night of the collision, even if the engineer's achieved 70 RPM as claimed by Zahar (who was relying on the Bridge Logger Tape), there would have been a collision in any event. The Bridge Logger Tape is the only tape which can conceivably be read as 70 RPM astern on the night of the collision. (d) If the vessel had achieved 76 RPM's astern on the night of the collision with an undamaged turbine and the RPM's were recorded on the night of the collision, there would have been no collision. (C-343, Line 5). (e) Finally, Dr. Corlett proved that if only 65 RPM's astern were achieved with a damaged turbine, and the rate of change were identical to that recorded rate at the time of sea trials, there would have been no collision. (C-343; Corlett N/T 1397-1405; C-87).

Thus, whenever the vessel was functioning with damaged turbines, a collision resulted except for line 6 on C-343. The hypothetical situation outlined there by Dr. Corlett (i.e. application of the rate of change of RPM's as rapidly as on the sea trials), could not have happened on the Queeny on the night of collision because the engineers would not apply the sea trials rate of change. Each one testified and confirmed that such a rate of change would have risked loss of power through a boiler surge. (Breton Dep. 80-82, Q-78; Ross Dep. Sept. 21, 1978, 19-20, 22, 49, 53, 48-49, 73-74, 131; C-355; Zahar N/T 381, 387)."

VII

In order for this finding to be fully comprehended, it is necessary to describe the method by which commands

are given to the Queeny's engines, and the meaning of "rate of change".

Commands to the Queeny's engines and control of her main throttle can be effectuated by three different methods. (1) Directly, termed "Bridge Control", whereby a throttle in the wheelhouse is operated which automatically controls the direction and speed of the engines; (2) Automatically by the engineer on watch using the engine room console, termed "Central Control"; or (3) Manually by the engineer on watch by operating the throttle control valve by hand, termed "Manual Control". When the ship is operating on either "Central Control" or "Manual Control" the engineer on watch receives his commands via the engine order telegraph.

When the ship is operating on "Bridge Control", the bridge has direct control of the ship's maneuvering speed and direction, and the response time of the engine is greatly reduced. Operation on either "Central Control" or "Manual Control" necessarily increases the engine response time because additional steps are taken before the throttle is adjusted in compliance with an order from the bridge.

Rate of change as used in the above paragraphs refers to the elapsed time from the time the full astern order was given by Captain Kellog until the time the throttles were actually placed on full astern. Operation on Bridge Control permits the Captain or Pilot to place the throttles in any position desired within a matter of seconds. On its sea trials, the Queeny was operated on Bridge Control, and the throttle response was approximately 5 seconds. Dr. Corlett's findings establish that if the sea trial rate of change (i.e. virtual instantaneous throttle response) applied), the Queeny would not have collided with the Corinthos, provided the engine achieved a minimum of 65 astern RPM's.

On the night of the collision, the Queeny was operating on Central Control. Central Control requires a desired command to be transmitted via the engine telegraph in the wheelhouse to the engine telegraph indicator in the engine room, an acknowledgment by the engineer, and then execution of the order by the operation of the control wheel which will automatically activate the throttles. On the night of the collision, operating on Central Control, 1 minute and 45 seconds elapsed from the time the order for full astern was given until the throttle was placed on full astern. In comparison to the amount of time which would have elapsed if the vessel was operating on Bridge Control, Dr. Corlett termed the rate of change on the night of the collision, slow. His findings establish that given the slow rate of change, the Queeny could have avoided the collision only if the vessel produced 76 astern RPM's. Though we do not find the failure to use "Bridge Control" to be a contributing cause of the collision, it is clear that the inability of the vessel to produce 76 astern RPM's was a contributing cause of the collision.

VIII

Because we have determined that the astern guardian valve and the astern turbine were defective at the time of the collision, and were contributing causes of the collision, we shall not make a finding regarding the claimants other alleged causes of the collision. Instead, we shall proceed to determine whether the Queeny management interests were privy to or had knowledge of the defective condition of the astern turbine and the astern guardian valve. We have concluded that the requisite knowledge existed.

The parties do not dispute that in the case of a corporate owned vessel, the privity or knowledge issue turns

on whether shore-based high leveled management was aware or should have been of the likelihood of the occurrence happening after the ship was under way. *Tittle v. Aldacosta,* 544 F. 2d 752, rehearing denied, 546 F. 2d 906, rehearing denied, 582 F. 2d 12 (5th Cir. 1977). Thus, we must determine what knowledge, if any, the owners of the Queeny had regarding the defective astern turbine and astern guardian valve at the time of the collision.

Difficulty with the operation of the astern guardian valve first surfaced in September, 1970, shortly after the Queeny was delivered to her owner. On her maiden voyage from Baltimore to Texas, the astern guardian valve malfunctioned by either sticking or jamming in the closed position. While in the closed position, steam is prevented from passing through to the astern turbine.

Normally, the valve is operated automatically by the limitorque motor. This motor provides torque to open or close the valve. The limitorque component of the valve limits the torque which can be applied by the motor. On the maiden voyage, the motor was incapable of moving the valve. Each time operation was attempted, the electrical circuit overloaded and the circuit breaker was tripped.

The astern guardian valve is equipped with a hand wheel which can be used to manually operate the valve. On the maiden voyage, the Queeny's Chief Engineer Breton attempted to turn the hand wheel, but was unable to do so. Eventually, Breton, with the assistance of Bethlehem Steel Guarantee Engineer Jensen, who also was aboard, was able to free the hand wheel by using a wrench which provided additional leverage. The wrench is referred to as a "cheater".

The use of the "cheater" enabled the engineers to apply excessive force to the hand wheel in order to break free the valve. The valve was jammed because the disc

and the valve body, both of which were manufactured from the identical grade steel, had welded together. The application of the excessive force not only broke the weld, but also chiseled free pieces of metal from the disc and the valve body, which metal pieces were projected into the astern turbine by the passing steam. The metal pieces damaged the astern turbine blades.

The instruction manual for the astern guardian valve specifically states that a "cheater" should never been used on the handwheel. The manual also states, in a section entitled "Trouble-Shooting: Excessive handwheel effort can indicate the following: (a) improperly lubricated or damaged valve stem; (b) valve packing gland too tight; (c) improperly lubricated valve; (d) stem nut too tight on valve stem; (e) faulty or damaged valve parts".

Rather than investigate the cause of the jamming of the valve, Breton and Jensen reset the limitorque circuitry to allow the valve to open and close.

Keystone management was aware of the difficulties with the astern guardian valve as of September 14, 1970. On that date, Samuel Spencer, Technical Assistant to the Vice President of Keystone, routed an internal memorandum to Adolph B. Kurz, President of Keystone, informing Kurz of the outstanding problem with the astern guardian valve. Spencer also notified Bethlehem Steel, specifically, E. L. Insley, the Chief Guarantee Engineer, regarding the difficulties with the astern guardian valve.

As a result of Keystone's complaints about the valve, and Jensen's reports to Bethlehem, the valve was listed by Bethlehem as an item for repair at the guarantee yard dry docking after six months of operation. Three separate items involving the valve were ultimately included in the "Status of Guarantee Items" list dated March 23, 1971. They were: (a) B-34 Astern Guardian Valve won't close; (b) B-57 Astern Guardian Valve; and (c) B-154 Astern Guardian Valve bracket.

As part of Bethlehem's guarantee service program, it was arranged for Guarantee Engineer Robert McKendrick to meet the Queeny at New Haven, her first northern port, on September 20, 1970. However, McKendrick did not examine the valve nor did he take steps to determine the cause, scope or nature of the problem. When he met the Queeny, he was informed that the problem was rectified.

Consequently, McKendrick submitted his trip report with the notation that the valve problem was solved and Bethlehem marked items B-34 and B-57 as completed. Thus, when the Queeny entered the shipyard for guarantee period repairs in March, 1971, the astern guardian valve was not opened and no inspection was made. The cause of the jamming and sticking of the valve was not investigated.

The Queeny interests' failure to insist upon an inspection of the astern turbine and astern guardian valve during the guarantee period repairs is not excusable on the ground that they were informed that after adjustment of the limitorque circuitry, the valve functioned properly. The clear warning contained in the instruction manual for the astern guardian valve "Trouble-Shooting" section placed the Queeny interests on notice of the possibility of damage to the valve. In view of this clear warning, it was incumbent upon the Queeny management to insist upon an adequate inspection during the guarantee period repairs.

Moreover, during the period of operation between the date of the sea trials and the date of the collision with the Corinthos, it was apparent that the astern turbine was not producing RPM levels in accordance with the specific commands given, and that the engine response time for orders for 60 RPM or greater, increased. These facts were readily ascertainable because the

Queeny is equipped with a data logger system which records on a continuous graph every engine command and the shaft response.

However, Queeny management failed to review the graph tapes. Proper monitoring of the turbine's performance by review of the graph tapes would have revealed the deficiency in the turbine's performance. Queeny management, having notice of the difficulties with the astern guardian valve, should have monitored the performance of the astern turbine to determine if it was affected by the prior difficulties with the astern guardian valve.

Moreover, difficulty with the turbines of the SS Spirit of Liberty, a sistership of the Queeny operated by Keystone, should have placed the defendants on notice that there was a possibility of damage to the Queeny's turbine and astern guardian valve. Both the Queeny and the Spirit of Liberty contained astern guardian valves manufactured by the William Powell Company according to the same specifications, using non-hardened metals.

Extensive damage to the Spirit of Liberty's astern turbine was discovered in December, 1973, when the turbine was opened and inspected during her quadrennial survey. It is noteworthy that the damage suffered by the astern turbine of the Spirit of Liberty was very similar to the damage subsequently discovered on the Queeny.

The cause of the damage to the astern turbine of the Spirit of Liberty was not ascertained. The origin of the metal particles that damaged the turbine was not isolated. If proper procedure was followed for determining the cause of the damage, the failure of the astern guardian valve would have been discovered. Since Keystone receives reports from Bethlehem regarding repairs to its ships, they would have been alerted to the possibility

of damage to the astern guardian valve on the Queeny when damage to the astern turbine of the Spirit of Liberty was reported.

Additional evidence combines with what has been recited to establish that Keystone negligently failed to monitor the performance of the Queeny's astern turbine.

In February, 1972, Keystone instructed all its Captains to perform turning circle tests and crash stop tests (emergency full astern). Though Captain Kellog performed turning circle tests, he refused to perform a crash stop test. He was apprehensive that such a test might damage the intricate and delicate propulsion system. By letter dated March 12, 1972, he expressed his fears to Keystone's Vice-President in charge of Operation, Chester Williams.

This letter clearly put Keystone on notice that the Queeny might be incapable of performing an important safety maneuver. Keystone, however, took no measures to determine the nature of Captain Kellog's fears.

If Keystone had been reviewing the graph tapes they would have discovered the problems associated with the functioning of the astern turbine. With such information in hand, the reason for Captain Kellog's refusal to perform the crash stop test would have been manifest.

The evidence referred to in this section of our opinion clearly indicates that the Queeny's shoreside management was aware, or was negligent in not being aware, of the vessel's unseaworthiness. The unseaworthy conditions referred to were contributing causes of the collision.

Based upon the legal precedent set forth in Section III of our opinion, we conclude that the Queeny interests are not entitled to limit their liability.

IX

Our conclusion regarding the Queeny interests' petition does not complete our inquiry. Also before us is the petition of the Corinthos interests for exoneration from and limitation of liability. The issue presented derives from the Queeny interests' contentions that the Corinthos was at fault for not inerting her tanks and that BP/Sohio were negligent in failing to have a shore-based inert gas system to be used during discharge of crude cargo.

After careful review of the Queeny interests' contentions, and review of the trial testimony, exhibits and all other supporting evidence, we have concluded that the absence of inerting systems was a contributing cause of the damages. For the following reasons, however, we shall not deny the petition of the Corinthos-BP/Sohio interests for exoneration from liability.

In an uninerted tanker, two of the three elements necessary for combustion are present; fuel, in the form of vapor from the cargo, and oxygen, drawn into the tanks during the discharging operations. The third element necessary for combustion is an ignition source.

An inert flue gas system removes oxygen from the tanks of crude carriers, rendering combustion dependent upon the simultaneous injection of two outside elements; oxygen plus an ignition source.

The system utilizes flue gas, manufactured as a by-product from combustion taking place in the vessel's own boilers. After the gas is cleaned it is pumped into the cargo tanks to displace the vapor and oxygen in the tanks, replacing it with an inert gas.

The Corinthos was not fitted with an inert gas system at the time of her construction, in 1963, nor had she been retrofitted prior to the collision.

The concept of inerting is not new. As early as 1925, Chevron inerted some of its ships. Chevron's lead was followed by Sun Oil, who in 1932, began inerting as a result of an explosion in one of its vessels. Sun Oil inerted ships as small as 16,000 tons. BP Ltd., the parent company of BP/Sohio, has been inerting ships since 1963. Her owners and operators were aware that she was not inerted. However, as early as 1972, the owners and operators had vessels constructed with inert gas systems, and in 1975, about the time of the collision, they retrofitted a vessel with an inert gas system.

The thrust of the Corinthos interests' argument is that at the time the Corinthos was built (1963) and as late as the time of the collision (1975), there was no requirement, either national or international, that a vessel the size of Corinthos be fitted with an inert gas system. In addition they contend that the explosions which followed the collision would not have been prevented by an inert gas system because the Corinthos' tanks were breached upon the collision, which would have allowed the escape of any inert gas, and the introduction of oxygen.

BP/Sohio contend that the Queeny interests' argument places them in the untenable position of either providing a shore based inert gas system for uninerted tankers, or refusing to allow such tankers to discharge their cargo. They claim that the technology for the shoreside inerting of tankers is not available, and since only a very small percentage of the world's tankers were inerted at the time of the collision, if the Court accepts the Queeny interests' position, BP/Sohio would be forced to cease operations because they would be unable to receive crude for refining.

With regard to the position of the Corinthos interests, we shall grant the petition for exoneration. We reach this decision reluctantly, and despite our strong pre-

dilection to deny the petition. In the absence of recently enacted legislation which sets forth the time frame for the retrofitting of varying size crude carriers with an inert gas system, we would hold that the Corinthos was unseaworthy at the time of the collision. *See,* The Port and Tanker Safety Act of 1978, Pub. L. No. 95-474, 92 Stat. 1471 (codified at 33 U. S. C. §§ 1221-1232; 46 U. S. C. §§ 214, 3912(a)).

Though in 1975, no law required the inerting of cargo tanks on vessels the size of the Corinthos, we believe that at that time, the custom of the industry was insufficient to satisfy common law standards of care. However, the Corinthos interests are fortunate that Congress has entered this field of law, thereby "preempting" the Courts from deciding this issue.

Under the time sequence contemplated by Congress, vessels the size and age of the Corinthos need not be retrofitted with an inert gas system until May 31, 1983. Congress determined to grant a grace period because of possible ramifications if it acted unilaterally in an area effecting international commerce. Congress chose instead to defer to the schedule and requirements established by the International Maritime Consultative Organization (IMCO).[4]

Though we must defer to the wisdom of Congress, which reached its conclusions only after extensive deliberation on the matter, we feel we would be remiss if we did not express the following thoughts.

The importance of an inert gas system must not be minimized. The instant collision resulted in the loss of 26

4. Congress modified the IMCO Protoculs in certain respects, inter alia, by requiring the retrofitting of inert gas systems on older crude carriers of over 20,000 Dead Weight Tons (DWT) versus 40,000 DWT, and by phasing in the requirement on older carriers effective May 31, 1983.

lives and numerous other personal injuries. If such tragedies can be prevented by the utilization of an inert gas system, we strongly urge vessel owners and operators to take every feasible step to comply with the adopted legislation prior to the effective date.

We believe the shipping industry has anchored itself to a position which does not meet common law standard of care requirements. Justification based upon cost, feasibility, and effectiveness are not acceptable.

Moreover, we have reservations whether efficacy serves as an explanation. The expert testimony elicited at trial by both the Queeny and Corinthos interests established beyond question that the risk of explosion or fire is greatly reduced or completely removed when an inert gas system is utilized.

The experts stated that an uninerted tanker which has discharged its cargo of crude has been likened to a floating time bomb. They explained that the enormous build-up of the fuel vapor coupled with the introduction of oxygen results in a circumstance ripe for explosion upon the introduction of an ignition source. By inerting the tanks of crude cargo ships, the highly flammable condition does not develop.

Expert testimony established that even upon the breaching of the cargo tanks, an explosion would not occur. Since a combustible mixture of oxygen and fuel vapor must be present for an explosion to occur upon the introduction of an ignition source, the atmosphere in an inerted tank will not be susceptible to explosion until after the inert gas is replaced by oxygen. In view of the size of the puncture in the Corinthos tanks, and the fact that additional inert gas may be pumped into the tanks as needed to maintain a non-combustible mixture, oxygen would not have been introduced at such a rapid rate as to instanteously create a dangerous vapor mixture.

We take judicial notice of the fact that few cases have brought this issue to fruition because of the industry's policy of avoiding said issue in those few cases which are not settled.

One case in this circuit, however, did address the issue. In the case of the *Petition of Oskar Tiedemann and Co. (Elna II/Mission San Francisco)*, 179 F. Supp. 227 (D. Del. 1959), *Aff'd*, 289 F.2d 237 (3d Cir. 1961), the court determined that the Mission San Francisco was unseaworthy. Its owners were denied both exoneration from and limitation of liability because the vessel was not equipped with a method to relieve the highly combustible atmosphere in the tanks caused by the discharge of jet fuel. That court discussed both butterworthing and the use of a flue gas system as acceptable methods for relieving the highly combustible condition created in tanks after discharge of crude.

Clearly, if Congress had not preempted this field the law of this circuit would require us to deny the petition of the Corinthos interests for exoneration from or limitation of liability.

Next, we must determine whether BP/Sohio were negligent in failing to have a shore-based inert gas system to be used during discharge or in allowing an uninerted vessel to dock at its pier.

Above, we discussed the mechanics of a flue gas system. The system prevents oxygen from mixing with fuel vapor in cargo tanks. It requires the manufacture of an inert gas which gas then is introduced into the cargo tanks. The inert gas can be manufactured either as a by-product of the fuel burned by the vessel or at a shore-based discharge facility.

Though the available technology for the construction and development of a shipboard system exceeds that for a shore-based facility, many of the principles are the same.

With a shore-based system, the inert gas must be pumped to the vessel via a hose connection and then directed to the cargo tanks in much the same manner, through the same piping system, as if the inerting was done by a ship-board system.

Not only do BP/Sohio dispute the feasibility of a shore-based system but also they contend that utilization of a shore-based system would be ineffective once a vessel was underway, because cargo tanks breathe, which would allow the inert gas to leak out.

Though we agree that a ship based system has many advantages, we believe that due to the highly dangerous nature of this activity, every reasonable safety precaution must be taken to minimize the possibility of explosion.

In the absence of recently enacted legislation, we would not hear BP/Sohio to complain that it would be overly burdensome to require them to provide a shore-based inerting system for non-inerted ships or to turn away non-inerted ships. We are not familiar with any rule of law which would allow a party to successfully defend itself against a claim of negligence or contributory negligence, on the ground that in an effort to save time and money and to avoid a burdensome task it did not undertake the reasonable precautions dictated by the nature of the activity.

Moreover, the fact that a shore-based system may be ineffective once a vessel is underway is irrelevant to the duty of care imposed upon the owners of a crude oil discharge facility. BP/Sohio need not concern themselves with what might happen once a vessel is underway.

However, because Congress has expressed a sensitivity to the practical issues involved in revamping the shipping industry's practice of not inerting crude carriers, we shall be equally accommodative, and not hold BP/Sohio partially responsible for this disaster.

IN THE
UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF PENNSYLVANIA

In the Matter of
The Complaint of Bankers Trust Company as Owner-Trustee and Monsanto Company as Chartered Owner, and Keystone Shipping Co., as Chartered Owner and Operator of the SS EDGAR M. QUEENY, for Exoneration from and Limitation of Liability

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C.A. No. 75-364

In the Matter of
The Complaint of VILLANEUVA COMPANIA NAVIERA, S.A., Owner of the tank vessel CORINTHOS, for Exoneration from and Limitation of Liability

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C.A. No. 75-2110

ORDER

The complaint and petition of Bankers Trust Company as Owner-Trustee and Monsanto Company as Chartered Owner, and Keystone Shipping Co., as Chartered Owner and Operator of the SS EDGAR M. QUEENY, for Exoneration from and Limitation of Liability is DENIED.

The complaint and petition of Villaneuva Compania Naviera, S.A., Owner of the tank vessel CORINTHOS, for exoneration from and limitation of liability is GRANTED.

The Court sets Friday, February 29, 1980 at 1:30 p.m. for the presenting of evidence on the issue of assessment of damages.

IT IS SO ORDERED.

/s/ CHARLES R. WEINER
Charles R. Weiner

UNITED STATES COURT OF APPEALS
FOR THE THIRD CIRCUIT

Nos. 80-1405, 80-1450, 80-1496

In the Matter of:
The Complaint of Bankers Trust Company as Owner-Trustee and Monsanto Company as Chartered Owner, and Keystone Shipping Co., as Chartered Owner and Operator of the S.S. EDGAR M. QUEENY, for Exoneration From and Limitation of Liability

and

VILLANEUVA COMPANIA NAVIERA, S.A., AMOCO OVERSEAS OIL COMPANY and AMOCO TRANSPORT COMPANY,

Third-Party Plaintiffs,

v.

BETHLEHEM STEEL CORPORATION, GENERAL ELECTRIC COMPANY and THE WILLIAM POWELL COMPANY,

Third-Party Defendants

Bankers Trust Company, Monsanto Company and Keystone Shipping Co.,

Appellants at No. 80-1405

BP Oil Inc. and SOHIO Petroleum Company, Claimants,

Appellants at No. 80-1450

Villaneuva Compania Naviera, SA.,

Appellant at No. 80-1496

(D. C. Civil No. 75-0364)

Nos. 80-1494, 80-1495, 80-1497

In the Matter of:
Complaint of VILLANEUVA COMPANIA NAVIERA, S.A., Owner of the tank vessel CORINTHOS, for Exoneration from and Limitation of Liability
ROYAL GLOBE INSURANCE COMPANY,
Intervenor Pltf.

NATIONAL GRANGE MUTUAL INSURANCE COMPANY and INSURANCE COMPANY OF NORTH AMERICA

v.

BETHLEHEM STEEL CORPORATION and GENERAL ELECTRIC COMPANY and THE WILLIAM POWELL COMPANY,
Third-Party Defts.

BRITISH PETROLEUM, LTD.; B.P. OIL INC. and SOHIO PETROLEUM COMPANY,
Third-Party Defts.

Bankers Trust Company, Monsanto Company and Keystone Shipping Co.,
Appellants at No. 80-1494

BP OIL INC. and SOHIO Petroleum Company, Claimants,
Appellants at No. 80-1495

Villaneuva Compania Naviera, S.A.,
Appellant at No. 80-1497

(D. C. Civil No. 75-2110)

ON APPEAL FROM THE UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF PENNSYLVANIA

Present: WEIS and HIGGINBOTHAM, *Circuit Judges* and DEBEVOISE, *District Judge* *

JUDGMENT

These causes came on to be heard on the records from the United States District Court for the Eastern District of Pennsylvania and were argued by counsel on January 13, 1981.

On consideration whereof, it is now here ordered and adjudged by this Court that the judgment of the said District Court, entered February 20, 1980, be, and the same is hereby reversed with respect to its denial of the petition for limitation of liability to Keystone, its holding that the preemption doctrine is applicable as to Villaneuva and to the extent that it made an alternate finding to deny Villaneuva's petition for limitation of liability because it failed to use an inert gas system on the CORINTHOS and the cause remanded for further proceedings consistent with the opinion of this Court. Costs taxed in favor of appellants at No. 80-1405; costs also taxed in favor of appellants at No. 80-1497.

It is further ordered and adjudged by this Court that the appeals at Nos. 80-1450 and 80-1495 be, and the same are hereby dismissed for lack of appellate jurisdiction. Costs taxed against appellants in those cases.

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* Honorable Dickinson R. Debevoise, United States District Court for the District of New Jersey, sitting by designation.

All of the above in accordance with the opinion of this Court.

ATTEST:

/s/ SALLY MRVOS
Sally Mrvos
Clerk

May 15, 1981

UNITED STATES COURT OF APPEALS
FOR THE THIRD CIRCUIT

Nos. 80-1405, 80-1450, 80-1496

In the Matter of:
The Complaint of Bankers Trust Company as Owner-Trustee and Monsanto Company as Chartered Owner, and Keystone Shipping Co., as Chartered Owner and Operator of the S.S. EDGAR M. QUEENY, for Exoneration from and Limitation of Liability

and

VILLANEUVA COMPANIA NAVIERA, S.A., AMOCO OVERSEAS OIL COMPANY and AMOCO TRANSPORT COMPANY,

Third-Party Plaintiffs,

v.

BETHLEHEM STEEL CORPORATION, GENERAL ELECTRIC COMPANY and THE WILLIAM POWELL COMPANY,

Third-Party Defendants

Bankers Trust Company, Monsanto Company and Keystone Shipping Co.,
Appellants at No. 80-1405

BP Oil Inc. and SOHIO Petroleum Company, Claimants,
Appellants at No. 80-1450

Villaneuva Compania Naviera, SA.,
Appellant at No. 80-1496

(D. C. Civil No. 75-0364)

Nos. 80-1494, 80-1495, 80-1497

In the Matter of:
Complaint of VILLANEUVA COMPANIA NAVIERA, S.A., Owner of the tank vessel CORINTHOS, for Exoneration from and Limitation of Liability
ROYAL GLOBE INSURANCE COMPANY,
Intervenor Pltf.

NATIONAL GRANGE MUTUAL INSURANCE COMPANY and INSURANCE COMPANY OF NORTH AMERICA

v.

BETHLEHEM STEEL CORPORATION and GENERAL ELECTRIC COMPANY and THE WILLIAM POWELL COMPANY,
Third-Party Defts.

BRITISH PETROLEUM, LTD.; B. P. OIL INC. and SOHIO PETROLEUM COMPANY,
Third-Party Defts.

Bankers Trust Company, Monsanto Company and Keystone Shipping Co.,
Appellants at No. 80-1494

BP OIL INC. and SOHIO Petroleum Company, Claimants,
Appellants at No. 80-1495

Villaneuva Compania Naviera, S. A.,
Appellant at No. 80-1497

(D. C. Civil No. 75-2110)

ON APPEAL FROM THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF PENNSYLVANIA

Present: WEIS and HIGGINBOTHAM, *Circuit Judges;* and DEBEVOISE, *District Judge.**

AMENDED JUDGMENT

These causes came on to be heard on the records from the United States District Court for the Eastern District of Pennsylvania and were argued by counsel on January 13, 1981.

On consideration whereof, it is now here ordered and adjudged by this Court that the judgment of the said District Court, entered February 20, 1980, be, and the same is hereby reversed with respect to its denial of the petition for limitation of liability to Bankers Trust Company, Monsanto Company and Keystone Shipping Co., its holding that the preemption doctrine is applicable as to Villaneuva and to the extent that it made an alternate finding to deny Villaneuva's petition for limitation of liability because it failed to use an inert gas system on the CORINTHOS and the cause remanded for further proceedings consistent with the opinion of this Court. Costs taxed in favor of appellants at No. 80-1405; costs also taxed in favor of appellants at No. 80-1497.

It is furthered ordered and adjudged by this Court that appeals at Nos. 80-1450 and 80-1495, be, and the same are hereby dismissed for lack of appellate jurisdiction. Costs taxed against appellants in those cases.

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* Honorable Dickinson R. Debevoise, United States District Court Judge for the District of New Jersey, sitting by designation.

All of the above in accordance with the opinion of this Court.

ATTEST:

/s/ SALLY MRVOS
Clerk

July 24, 1981

UNITED STATES COURT OF APPEALS
FOR THE THIRD CIRCUIT

Nos. 80-1405, 80-1450, 80-1496

In the Matter of:
The Complaint of Bankers Trust Company, et al. and Villaneuva Compania Naviera, S.A., et al. v. Bethlehem Steel Corporation, et al.,

Bankers Trust Company, et al.,
Appellants at No. 80-1405

BP Oil Inc., et al.,
Appellants at No. 80-1450

Villaneuva Compania Naviera, SA.,
Appellant at No. 80-1496

Nos. 80-1494, 80-1495, 80-1497

In the Matter of:
Complaint of Villaneuva Compania Naveria, S.A., etc., et al.; National Grange Mutual *Insurance* Company v. Bethlehem Steel Corporation, et al. v. British Petroleum, Ltd., et al.

Bankers Trust Company, et al.,
Appellants at No. 80-1494

BP Oil Inc., et al.,
Appellants at No. 80-1495

Villaneuva Compania Naviera, S.A.,
Appellant at No. 80-1497

SUR PETITION FOR REHEARING

Present: SEITZ, *Chief Judge*, ALDISERT, ADAMS, GIBBONS, WEIS, and HIGGINBOTHAM, *Circuit Judges*, and DEBEVOISE, *District Judge.**

The petition for rehearing filed by Villaneuva Compania Naviera, S.A., et al., Appellants in Nos. 80-1496 and 80-1497, in the above entitled cases having been submitted to the judges who participated in the decision of this court and to all the other available circuit judges of the circuit in regular active service, and no judge who concurred in the decision having asked for rehearing, and a majority of the circuit judges of the circuit in regular active service not having voted for rehearing by the court in banc, the petition for rehearing is denied.

BY THE COURT:

/s/ A. Leon Higginbotham
Circuit Judge

Dated: July 8, 1981

* Honorable Dickinson R. Debevoise, United States District Court for the District of New Jersey, sitting by designation.

** Judges Hunter, Garth and Sloviter did not participate in the disposition of this petition for rehearing.

UNITED STATES COURT OF APPEALS
FOR THE THIRD CIRCUIT

July 15, 1981

Nos. 80-1405, 80-1450, 80-1494/7

In the Matter of:
The Complaint of Bankers Trust Co., et al.
Bankers Trust Co., et al.,
Appellants in No. 80-1405

BP Oil Inc., et al.,
Appellants in No. 80-1450

Villaneuva Compania Naviera, etc.,
Appellant in No. 80-1496

(D. C. Civil No. 75-0364)

In the Matter of:
Complaint of Villaneuva Compania, et al.
Bankers Trust Co., et al.,
Appellants in No. 80-1494

BP Oil Inc., et al.,
Appellants in No. 80-1495

Villaneuva Compania Naviera, et al.,
Appellant in No. 80-1497

(D. C. Civil No. 75-2110)

Present: WEIS, and HIGGINBOTHAM, *Circuit Judges* and DEBEVOISE, *District Judge* *

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1. Letter dated July 15, 1981 from Richard W. Palmer, Esquire counsel for Villaneuva Compania Naviera, S.A. which in part request that the Court grant them sufficient time in which to review the Motion of Bankers Trust Company for Clarification of Judgment.

2. Motion of Villaneuva Compania Naviera, S.A. for Stay of Mandate pending a petition for certiorari and determination by this Court of the damage issues raised in the subject litigation.

in the above-entitled cases. Any Answer which would be due by July 22, 1981 will be forwarded to you upon receipt of same.

Respectfully,

/s/ Sally Mrvos
Clerk

enc.
bjr

Per the request of Richard Palmer, Esquire, attorney for Villaneuva Compania Naviera, S.A., a Stay of the Mandate is granted until October 6, 1981.

By THE COURT

/s/ A. Leon Higginbotham
Circuit Judge

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* Sitting by designation.

SUPREME COURT OF THE UNITED STATES

No. A-257

VILLANEUVA COMPANIA NAVIERA, S.A.,
Petitioner

v.

BANKERS TRUST COMPANY, ET AL.

ORDER EXTENDING TIME TO FILE PETITION FOR WRIT OF CERTIORARI

UPON CONSIDERATION of the application of counsel for petitioner,

IT IS ORDERED that the time for filing a petition for writ of certiorari in the above-entitled cause be, and the same is hereby, extended to and including December 5, 1981.

/s/ William J. Brennan, Jr.
Associate Justice of the Supreme
Court of the United States

Dated this 28th day of September, 1981

UNITED STATES COURT OF APPEALS
FOR THE THIRD CIRCUIT

October 6, 1981

Nos. 80-1405, 80-1450, 80-1494/7

In the Matter of:
The Complaint of Bankers Trust Co., et al.
Bankers Trust Co., et al.
Appellants in No. 80-1405

BP Oil Inc., et al.,
Appellants in No. 80-1450

Villaneuva Compania Naviera, etc.,
Appellant in No. 80-1496

In the Matter of:
Complaint of Villaneuva Compania, et al.
Bankers Trust Co., et al.,
Appellants in No. 80-1494

BP Oil Inc., et al.,
Appellants in No. 80-1495

Villaneuva Compania Naviera, et al.,
Appellant in No. 80-1497

TO: HIGGINBOTHAM, *Circuit Judge*

1. Motion of Bankers Trust Company, et al. for a Continuance of Stay of Mandate pending application for a writ of certiorari and determination by this Court of the damage issues raised in the subject litigation.

2. For your information this Court's mandate has previously been stayed to October 6, 1981.

in the above-entitled case. We have been advised by counsel for BP Oil and Sohio Petroleum Company and by counsel for Villaneuva Compania that they intend to file opposition to the Motion to Stay, etc. Upon receipt of such opposition it will be forwarded to you.

Respectfully,

/s/ Sally Mrvos/bjr
Clerk

enc.
bjr

The foregoing Motion is granted and the mandate is hereby stayed until December 5, 1981.

By the Court,

/s/ A. Leon Higginbotham
Circuit Judge

Dated: November 3, 1981

UNITED STATES COURT OF APPEALS
FOR THE THIRD CIRCUIT

In the Matter of:
Complaint of Bankers Trust Company as Owner-Trustee, et al.

Bankers Trust Company, Monsanto Company and Keystone Shipping Co.,
Appellants, No. 80-1405

Villaneuva Compania Naviera, S.A.,
Appellant, No. 80-1496

(D.C. Civil No. 75-0364)

PETITION FOR REHEARING IN BANC

RICHARD W. PALMER
VERNON C. MILLER, JR.
ALFRED E. YUDES, JR.
ROBERT F. RUSSELL
COUNSEL FOR VILLANEUVA COMPANIA NAVIERA, S.A.
Palmer Biezup & Henderson
Suite 956
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(215) 625-9900

PETITION FOR REHEARING IN BANC

Villaneuva Compania Naviera, S.A., hereby petitions for Rehearing *in banc* of Appeals numbered 80-1405, and 80-1496, pursuant to Federal Rules of Appellate Procedure (FRAP) 35 and 40 and Third Circuit Local Rules 21(2)B(b) and 22.

The Court of Appeals, in its opinion and order filed May 15, 1981, reversed the District Court and found that the EDGAR M. QUEENY interests (Bankers Trust Co., Monsanto Co. and Keystone Shipping Co.) * were entitled to limit their liability pursuant to 46 U.S.C. Section 183 *et seq.* for damages arising out of the collision of the QUEENY with the properly moored CORINTHOS on January 31, 1975. The QUEENY interests conceded liability at the outset of trial. (Trial Transcript July 19, 1979, page 39). The claims of Villaneuva and BP/Sohio amount to about $40,000,000.00.

The Limitation Act provides that an owner or bareboat charterer of a vessel may limit liability caused by the negligence or unseaworthiness of the vessel, by proving lack of privity or knowledge of such negligence or unseaworthiness. (46 U.S.C. 183 *et seq.*). The alleged value of the QUEENY asserted at $11,000,000.00 has not yet been proved.

The District Court was not clearly erroneous in holding that the owners and operators knew or should have known that the vessel's backing power was deficient and that such unseaworthy condition was a contribution cause of the collision and limitation was properly denied. (2915a, 2944a).

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* All QUEENY interests were allowed to limit, despite the fact that neither Bankers Trust nor Monsanto presented any evidence to show lack of privity or knowledge. This result is contrary to the applicable case law requiring the petitioner seeking limitation to carry the burden of proving that it has no privity, knowledge, or reasonable means of obtaining knowledge of negligence or unseaworthiness. (*infra*, pp. 12-13).

We express a belief, based on a reasoned and studied professional judgment, that the panel decision is contrary to decisions of the United States Court of Appeals for the Third Circuit and the Supreme Court of the United States, and that consideration by the full court is necessary to secure and maintain uniformity of decisions in this Court as follows:

As to what constitutes privity and knowldege: Spencer Kellogg and Sons, Inc. v. Hicks, 285 U.S. 502, 512 (1932); The CHICKIE, 54 F.Supp. 19, 20 (W.D. Pa. 1942), *modified,* 141 F.2d 80 (3rd Cir. 1944);

As to the vessel owner's burden of proving that he has no privity or knowledge: Coryell v. Phipps, 317 U.S. 406, 409 (1943); *Petition of Diamond Coal & Coke Co.,* 297 F. 238, 239 (W.D. Pa. 1923), *aff'd,* 297 F. 246 (3rd Cir. 1924), *cert. denied,* 265 U.S. 595 (1923).

Also, this appeal involves a question of exceptional importance: Is a ship owner chargeable with knowledge of what a reasonable examination of vessel performance records would reveal about the seaworthiness of his vessel, or may a vessel owner ignore with impunity the vessel's performance records, admittedly maintained for the purpose of monitoring the vessel's propulsion capability?

I. THE COURT OF APPEALS MISAPPREHENDED AND OVERLOOKED FACTS ADMITTED BY KEYSTONE OFFICERS WHICH PROVED A REASONABLY AVAILABLE MEANS FOR ESTABLISHING THEIR KNOWLEDGE OF THE QUEENY'S UNSEAWORTHINESS.

A. *Keystone's Knowledge of The QUEENY's Unseaworthiness Arises From Notice of The Deficient Backing Power of The Astern Turbine and Not From The Astern Guardian Valve. (2932a, 2936a, 2419a).*

The appeals panel overlooked that Keystone had an admitted means of monitoring the astern turbine so that

knowledge of the defective astern guardian valve was irrelevant to notice of the backing power deficiencies. (Op. 16). (*infra*, pp. 5-10).

The District Court stated:

> "It is clear that the condition of the QUEENY's *turbine* rendered her unseaworthy." (Emphasis added) (D.Ct. Opinion, February 19, 1980, 2932a)

The District Court, after extensive fact and expert testimony, concluded that if the QUEENY's turbine had functioned properly, the QUEENY would not have collided with CORINTHOS. (2932a). It also concluded the deterioration of the vessel's astern turbine power (i.e., her reduced astern RPM's) contributed to the collision.[1] The vessel's backing capacity was essential to avoid collision, even when contributed to by the negligence and carelessness of her navigators.[2]

The defects of the astern guardian valve were proved (a) to explain the cause of the damage to the astern turbine, and (b) to provide a basis for the products liability claims of CORINTHOS, BP/Sohio and others against the turbine and valve makers. Dr. Corlett testified without contradiction that the engines should not have deteriorated in the absence of a specific casualty. (Corlett, 838a-839a).

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1. The Appellate panel did not disturb these conclusions.

2. The District Court was urged by counsel for QUEENY to commit the mistake made by the Appellate Court which has incorrectly concluded that shore management could not have prevented the negligence of the pilot and master; however, this Court has failed to appreciate that one of the important purposes of the emergency astern backing power is to provide the capability to overcome negligence of navigators and to avoid disasters.

Keystone had knowledge of the deterioration of the QUEENY's backing power.[3] (See *Infra* 5-10). The Court of Appeals should have affirmed that the QUEENY interests by reasonable investigation should have ascertained her unseaworthy astern turbine and, by repairing it, could have prevented the collision.

B. *The QUEENY Interests Had Notice From Available Records Of Vessel Performance Charging Them With Knowledge Of The Deficient Turbines.*

Even if the owners, charterers and/or managers fail to undertake reasonable investigation after notice from available records, they are chargeable with the knowledge such an investigation would have revealed. *Spencer Kellogg & Sons, Inc. v. Hicks, supra;* The RUTH CONWAY, 75 F.Supp. 514, 519 (D. Md. 1947), *aff'd,* 171 F.2d 416 (4th Cir. 1948), *cert. denied,* 337 U.S. 907 (1949); *Great Atlantic & Pacific Tea Co. v. Brasileiro,* 159 F.2d 661 (2nd Cir. 1947), *cert. denied,* 331 U.S. 836 (1947); THE ARGENT, 1940 AMC 508 (S.D.N.Y. 1915); The VESTRIS, 60 F.2d 273 (S.D.N.Y. 1932); THE SANTA ROSA, 249 F. 160, 162 (N.D. Cal. 1918).

Further inquiry into astern power deficiencies was required as proved by the following credible evidence at trial: (1) the testimony of Keystone's own executive officers as well as other fact and expert testimony concern-

3. Keystone had actual notice of the valve problem. On January 24, 1975, seven days before the collision, Keystone issued repair specifications for her quadrenniel drydocking (already delayed 1 year) which outlines repairs to the valve clearly indicating that shore management knew the valve required opening and removing to a shop for machining. Keystone admitted it forwarded these specifications to various yards for bids before the collision. Blume dep. 1952a; Spencer dep. July 28, 1978, pp. 11-15, C-318, Villanueva Main Brief Point A.5 pp. 16-20.

ing the purpose and significance of Engine RPM recorder tapes; (2) the letter of the Master of the QUEENY dated March 12, 1972 reporting he was "apprehensive" about performing a crash stop test; (3) the sister ship problem.

As the Court noted in The ARGENT, *supra*:

> "If lack of actual knowledge were enough, imbecility, real or assumed, on the part of owners, would be at a premium. . . .
>
> [Owners] cannot be permitted to make their own ignorance and defective supervision of their own business a continuing defence. . ." (p. 509)

However, having admittedly failed to make any inquiry, Keystone is properly charged with knowledge of the vessel's astern power deficiency because any reasonable inspection of the engine performance records and of the astern turbine itself would have revealed the power deficiency. (Williams 1728a, 1818a; Doerr 2524a; Vail 1117a)

1. *Engine RPM Recorder Tapes.*

Adolf Kurz, President of Keystone, and Chester D. Williams, Vice President of Operations each specifically admitted that the purpose of the RPM recorder tapes was to enable shore management to monitor the vessel engine performance. (Kurz 1393a-1394a; Williams 1726a-1729a, 1819a). Keystone's Assistant Manager of Maintenance and Operations also specifically admitted that the tapes were sent to the office (Vail 1117a) and the Chief Engineer confirmed this (Breton 1658a). Mr. Williams admitted that these tapes were important to Keystone's awareness of the vessel's performance (1819a). The Manager of Maintenance and Repair admitted that it was

Keystone's policy promptly to correct any problems with vessel equipment (2568a) and that documents received from vessels are reviewed if they relate to the performance of engines. (Doerr dep. Aug. 29, 1979, pp. 127-129).

The District Court heard, believed and properly accepted the admissions of Keystone's own officers, i.e., that they had an available means for a minute by minute monitoring of the vessel's ahead and astern RPM performance, independent of outside forces. (Kurz, Supra; Vail 1117a-1118a; 1135a-1136a; Zahar 202a-203a; Breton 1655a, 1660a-1661a).

The District Court correctly held that the reduced astern power was: ". . . readily ascertainable because the QUEENY is equipped with a data logger system which records on a continuous graph every engine command and the shaft response." (2941a)

It was not necessary for CORINTHOS to prove the details of knowledge of the shore management as to the reduced astern power, but rather for Keystone to prove that such knowledge was not reasonably available. The QUEENY interests failed to carry this burden. (See pp. 12-14, *infra*).

The appeals panel thus misapprehended the critical importance of the RPM recorder tapes for monitoring vessel performance. Keystone installed the tapes on the vessel and required that they be sent to the main office ashore. (*Supra*, p. 5). This Court should not allow Keystone to ignore the recorded information.

The appeals panel was unjustified in stating that the tapes had "minimum probative value", (Op. p.22). By so doing this Court reversed facts which were heard and believed by the District Court and the overwhelming weight of the credible evidence and the admissions of three executive officers of Keystone.

Dr. Corlett * reviewed the tapes and testified that they graphically showed the ahead and astern RPM's ordered and achieved at any time. To support his opinion, Dr. Corlett examined the tapes generated by the QUEENY from her sea trials in August, 1970 through June, 1975, calculating the astern RPM's, graphically showing each full astern order and response in Fig. 10.1 (C-87, 3014a; 3109a; S.A.1.1 *et seq*). Figure 10.1 shows all instances when 65 RPM's astern or more were ordered; it also shows the actual shortfall of astern RPM's achieved by the astern turbine in response to each order. (Corlett 3109a; 2936a; 2941a). Dr. Geisler ** was able to correlate this shortfall to a 43.3% reduction in astern power available. (Geisler 1314a-1319a).

The District Court, having observed and evaluated Dr. Corlett's testimony first hand, concluded his testimony, report, calculations (including Fig. 10.1) and conclusions (C-87, Fig. 10.1, ¶ 8(f), (g) and (h) (3027a) (Op. 2932a-2934a, 2941a)) were reliable and credible and gave great weight to his opinion and all the evidence in his report necessary to buttress his opinion. (1400a).

During argument on the admissibility of Dr. Corlett's calculations in Fig. 10.1 (astern turbine RPM's from the tapes on Fig. 10.1), the Court stated:

> "The Court will receive those calculations and that part of his report that is buttressing his opinion." (1400a)

The District Court was therefore not clearly erroneous when it held that "If Keystone had been reviewing the

* Dr. Corlett was an expert hydrodynamicist who testified for the CORINTHOS and BP/Sohio.

** Dr. Geisler is a marine turbine expert who testified for the CORINTHOS. His work with other damaged turbines allowed him to quantify the extent of power loss based on the observed damage to the QUEENY's astern turbine.

graph tapes, they would have discovered the problems associated with the functioning of the astern turbine." (2943a).

The District Court Opinion stated that examination of the tapes was a reasonable means to ascertain the power deficiency. (2941a).

This was a clear demonstration that the District Court had understood the significance of the tapes and admitted them, relying on their trustworthiness, and accuracy.

Further, in discussing the admissibility of the matrix prepared by Dr. Corlett (C343, 3282a) showing the relationship of speed of application of throttle to RPM's achieved with respect to whether or not there would have been a collision, the Court clearly demonstrated its understanding of Dr. Corlett's conclusions that the backing power had deteriorated (854a; 855a).

There are no magic words required to admit documents or records into evidence. *Hastings v. Reynolds Metals Co.*, 165 F.2d 484, 486 (7th Cir. 1947).[1] The Trial Court demonstrated it was satisfied with the authenticity, reliability and trustworthiness of the proffered RPM tapes.[2] Through words or actions, the astern data from the four years' intervening tapes as shown on Fig. 10.1 should be deemed admitted into evidence. *Reyes v. Wyeth Laboratories*, 498 F.2d 1264, 1287 (5th Cir. 1974), *cert. denied*, 419 U.S. 1096 (1974).[3]

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1. "It is not indispensable that an exhibit be offered and admitted in evidence by any precise words. If it is clear, as it is in this case, that the exhibit is being offered for consideration as evidence and is received and considered as such, it is evidence and is a part of the trial proceedings." (486)

2. The collision tapes were admitted and the sea trial tapes were admitted over vigorous objections. (Op. 22; 1395a; 1399a)

3. "if the exhibit is 'necessary and trustworthy, relevant and material', the trial judge is free to exercise his discretion and admit it . . ." (p. 1287). (1287).

The Court of Appeals has overlooked Rules 702, 703 and 803 of the Federal Rules of Evidence.

FRE 702 permits the Trial Court to rely upon the opinion of an expert in determining a fact in issue. FRE 703 permits an expert to base his opinion on data which is reasonably relied upon by experts in that field, even where the data itself is not independently admitted in evidence. Since the company whose records are at issue admits that such records are regularly maintained and contain the specific information for which CORINTHOS offered them (i.e., knowledge of astern RPM deficiencies), the Court of Appeals should not reject the company's own admitted monitoring procedures.

The four years' intervening tapes are also admissible as business records under FRE 803 (6) since they were placed on the vessel by Keystone, required to be used and required to be sent ashore periodically to Keystone management to facilitate monitoring the vessel's engine performance.

In considering the admissibility of tachograph tapes which were installed in trucks to record the speed and were required to be turned in to the office, such tapes were admissible. *National Labor Relations Bd. v. Pacific Intermountain Exp. Co.*, 228 F.2d 170, 172 (8th Cir. 1956).

If the intervening tapes had not been admitted, the Court of Appeals would have committed a serious oversight in failing to observe that Keystone acknowledged the existence of a record and conceded that it actually contained the precise information necessary to show Keystone that the QUEENY's backing power was deficient, rendering the vessel unseaworthy.

There was also an alternative theory for establishing privity and knowledge without the tapes themselves literally being in evidence; this theory fully supports the District Court opinion: (1) the Court below was satisfied that the QUEENY was unseaworthy on the night of the

collision because of deficient backing power. (The Court of Appeals did not take exception to this finding); (2) the QUEENY then failed to sustain her burden of proving lack of knowledge of the unseaworthy condition of the astern turbine prior to the collision, in the face of admissions by Keystone's own officers that such information was available through their own records.

The appellate panel did not appreciate the impact of the QUEENY's failure to offer the tapes on her own behalf. If the RPM recorder tapes could have been used to carry the burden of proving the QUEENY actually had her full backing power during those years, the QUEENY would certainly have used them for that purpose.

An inference of knowledge must be made against the QUEENY for her failure to offer the intervening four years' tapes to prove no knowledge. The Court of Appeals has failed to recognize that the QUEENY had the burden of proving lack of knowledge or the means to obtain such knowledge and this burden the QUEENY failed to carry. *Coryell v. Phipps, supra; Petition of Diamond Coal Co., supra, Complaint of B.F.T. No. Two Corp.*, 433 F. Supp. 854 (E.D. Pa. 1977); *States Steamship Company v. United States*, 259 F.2d 458 (9th Cir. 1958), *cert. denied*, 358 U.S. 933 (1959).

If the Court had in fact finally excluded the four years' intervening tapes, notwithstanding their reliability and authenticity upon an offer of either petitioner Keystone or the CORINTHOS as claimant, such exclusion would have been reversible error, particularly where the Court clearly admitted Exhibit C-87 which contained Dr. Corlett's calculations and actual abstract (Fig. 10.1) of the astern RPM's of 65 and over. *Reyes v. Union Carbide Corp.*, 426 F.2d 633 (3rd Cir. 1970) (error to admit abstract of hospital record but exclude entire record as offered). *Woods v. National Life & Accident Ins. Co.*, 347 F.2d 760 (3rd Cir. 1965) (exclusion of V.A. record prejudicial).

2. *The Master's Letter to Keystone Dated March 12, 1972. (Q.9,2957a).*

The Court of Appeals has taken an unusual step in summarily reversing the District Court's reliance on the Master's letter of March 12, 1972, criticizing the reasoning below as unrealistic hindsight created by counsel for CORINTHOS and BP/Sohio. (Op. 18).

Three officers of Keystone specifically admitted that the Master's letter stating that he was "apprehensive to perform" a crash stop test required *some further action or inquiry* by shore management (Adolph Kurz, President, 1392a-1393a; Chester D. Williams, Vice President for Operations, 1813a-1815a; Robert S. Doerr, Manager of Maintenance and Repair, 2545a-2548a). It was irrelevant that the Master was not ordered to do a crash stop. (Op. 23).

The importance of this letter was that it placed the company officers on notice that they should take some action to ascertain why the master was "apprehensive" and why he also said "not mentioning probable damage to the intricate propulsion system". (Q.9, 2957a). Keystone admitted that no action was taken. (Williams 1722a-1723a; Kellog 364a-365a). The QUEENY management can not limit liability in these circumstances having admitted the fact of notice and therefore knowledge which reasonable investigation would have furnished. *Spencer Kellog & Sons, Inc., supra,* The VESTRIS, *supra,* The SANTA ROSA, *supra, China Union Lines, Ltd. v. A. O. Anderson & Co.,* 364 F.2d 769 (5th Cir. 1966), *cert. denied,* 386 U.S. 933 (1967).

The Court of Appeals expressly demonstrated its misunderstanding of the evidence when it stated:

> ". . . there simply is not enough evidence in the record to lead us to the conclusion that Kellog's letter was

related to the *valve* problem . . ." (Op. 24). (Emphasis Added)

The evidence overwhelmingly established that Kellog's letter was related to the backing power capacity and *not* specifically or even generally to the valve. (Kellog 363a).

The legal significance of the Master's letter has escaped the Appeals Panel: it constitutes an admitted failure of management to take further action upon receipt of it when considered with the admission of management that some further action should have been taken. (*Supra*, p. 10).

3. *Sister Ship Problem.*

In March 1972 a sister ship of the QUEENY, the SPIRIT OF LIBERTY, performed a crash stop test as requested by Keystone management, and achieved only 62.5 RPM astern as compared with 76 RPM astern which it achieved on sea trials. (Williams Dep. 1735a-1736a). Notwithstanding this shortfall, Keystone made no inquiry as to the cause, although the manager of Maintenance and Repair admitted that a problem found on one vessel in a class is passed on "immediately". (Doerr Dep., August 29, 1978, pp. 127-128). In December 1973 the astern turbine of the SPIRIT OF LIBERTY was opened up and damage discovered. (Vail 1139a-1140a). Despite this indication of astern turbine damage which manifested itself in reduced astern RPM, Keystone failed to relate this experience to the QUEENY. Prudent management should have related problems on one ship to a sister ship to determine if the problem was common to that class of ships.* This Keystone failed to do.

The Court of Appeals overlooked that the foregoing indication of astern turbine deficiency, which at the very least, must put Keystone on notice of the astern turbine deficiency of the QUEENY and charge Keystone with the

* In this regard it is important for the Court to understand that, 4 years after the QUEENY collided with the CORINTHOS and after both her astern turbine and astern guardian valve were repaired to original specifications in March/April 1975, the

duty to make reasonable inquiry or, failing to make a reasonable inquiry. *Petition of Marine Navigation Sulphur Carriers, Inc.* (MARINE FLORIDIAN) 1980 A.M.C. 983, 998-999, *aff'd* 1980 A.M.C. 1002 (4 Cir. 1979)

Keystone admitted it failed to make any inquiry (*Supra,* p. 11). Therefore, Keystone must be charged with such knowledge of the vessel's astern power deficiency as a reasonable inquiry would have revealed.

II. THE COURT OF APPEALS IMPROPERLY PLACED ON VILLANEUVA THE BURDEN OF PROVING KEYSTONE'S PRIVITY AND KNOWLEDGE OF THE QUEENY'S DEFICIENT BACKING POWER.

The burden of disproving the privity and knowledge of the QUEENY's shore management as to her unseaworthiness caused by deficient backing power should have been placed on the QUEENY interests, rather than requiring Villaneuva affirmatively to prove such knowledge. (Op. 24).

The panel also ignored the admission of three Keystone Executive Officers that the company installed the engine tapes for purposes of monitoring the vessel's engine performance. The panel incorrectly found that these admissions were not significant enough to support a ruling that Keystone had failed to disprove privity and knowledge of the astern turbine deficiency. (*Supra,* pp. 5-12).

This is a surprising misapplication of the law of burden of proof of privity and knowledge in a limitation

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* (Cont'd.)

QUEENY again went into the yard for a regularly scheduled quadrennial survey. When the astern turbine and the astern guardian valve were opened in August 1979, the District Court recessed the trial herein to permit the experts including CORINTHOS expert witness Watson to attend. The turbine blades were found in August 1979 to have sustained damage similar to that found in 1975. (Watson 541a-549a).

case, since the panel has correctly stated the law on page 16. The Court of Appeals has thus made a clear mistake by departing from its own statement of the law.

The panel should have required Keystone to prove that before the collision it had no knowledge or any means to learn of the unseaworthiness of the vessel. (In re *American Dredging Co.*, 235 F.2d 618, 619, reversed on other grounds sub. nom. 355 U.S. 426; Op. 16)

There is no possible basis on which this Court can conclude that the QUEENY sustained her burden of proving that there were no reasonable means of knowledge to ascertain the deficiency of backing power to overcome such unseaworthiness, particularly in the face of the admitted existence of the tapes installed for the purpose of monitoring engine performance. (*Supra*, pp. 5-8). Moreover, Bankers Trust Co. and Monsanto Co., also seeking limitation, had the same burden which they clearly failed to sustain. Neither offered any evidence whatsoever of lack of privity or knowledge. They both must be denied limitation. *THE PETITION OF LONG*, 293 F.Supp. 172, 179 (S.D.N.Y. 1968), *aff'd*, 439 F.2d 109, 111 (2d Cir. 1971).

The panel, without justification, has relieved the QUEENY interests of responsibility for monitoring reasonably available data from the tapes, a responsibility admitted by Keystone.

III. The Court by Its Own Precedents Was Obligated to Support the District Court by Any Credible Evidence in the Record and to Hold That the Queeny Shore Management Had the Means of Obtaining Knowledge of the Queeny's Unseaworthiness Prior to the Collision Even if Such Evidence Was Not Relied Upon by the Court.

It was error for the Court of Appeals not to consider the allegations of Keystone's knowledge of other condi-

tions of unseaworthiness which contributed to cause the collision. (Op. p. 16-17, F.N. 11).

An appellee may assert in a reviewing court any ground in support of his judgment, whether or not that ground was relied upon or even considered by the trial court. In reviewing the District Court decision, the Circuit Court should rely on all portions of the record. *Dandridge v. Williams,* 397 U.S. 471, 475 n.6, (1970); *Colautti v. Franklin,* 439 U.S. 379, (1979), *Washington Steel Corp. v. T W Corp.,* 602 F.2d 594, 602 (3rd Cir. 1979); *Waterman Steamship Corp. v. Gay Cottons,* 414 F.2d 724 (9th Cir. 1969).

Evidence was adduced at the time of trial that the QUEENY shore management failed to issue proper and reasonable safety and operating instructions. It was also clear that Keystone failed to follow up the compliance by the Master and officers of the QUEENY, and by reason of such failure Keystone must be denied limitation (2927a-2928a).

(1) At the time of the collision on January 31, 1975 QUEENY's management failed to issue instructions on the posting of an anchor watch while maneuvering in confined or restricted waters. (Williams 1778a-1782a) A proper anchor watch was required for the congested waters of Marcus Hook to meet a reasonable standard of care. (Bailey 665a-666a, 672a).

(2) failure to use an important safety device for emergency, such as bridge control of engines where the failure of use was known by Keystone. The Court and all counsel agreed that the decision not to use the automatic bridge control was a "management decision". (1391a); (Zahar 271a-273a); *Orient Steam Navigation Co. v. U.S.,* 231 F.Supp. 469, 474 (S.D. Cal. 1964); 3 Benedict, 5-18-23, F.N. 5, 7 & 8, 7th Ed. 1980. If there are instructions to promote safety, it is essential that they

be policed. The M.V. HOPERANGE, 226, F.Supp. 1018 (E.D. Pa. 1964), aff'd 345 F.2d 451, 452, 453 (5 Cir. 1965) *Avera, supra.*

(3) failure of the QUEENY management to advise the Master and officers of an important safety factor of the vessel maneuvering, i.e., that the bow thruster had been increased in power from 1200 to 1600 amps (2928a) (Zahar 268a-270a; C-3, 3007a; Kellog 411a; Ross 1478a-1479a); *China Union Lines, supra.*

The failure of shore management to ensure by adequate follow up procedures that the vessel's equipment was properly maintained and safety rules enforced is sufficient as a matter of law to deny a vessel owner the right to limit liability. *Kellog v. Hicks, supra.;* MARINE FLORIDIAN, *supra.*

CONCLUSION

The decision of the Court of Appeals should be reheard and reversed to hold that the shore management of the QUEENY had knowledge of the unseaworthiness of the vessel and her reduced astern power and that her petition to limit liability should be denied for all of the foregoing reasons.

Respectfully submitted,

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IN THE
UNITED STATES COURT OF APPEALS
FOR THE THIRD CIRCUIT

In the Matter of:

Complaint of Bankers Trust Company as Owner-Trustee, et al.

Bankers Trust Company, Monsanto Company and Keystone Shipping, Co., *Appellants, No. 80-1405*
Villaneuva Compania Naviera, S.A., *Appellant, No. 80-1496*

(D.C. Civil No. 75-0364)

TO:

James F. Young, Esquire
Krusen, Evans & Bryne
Public Ledger Building
Philadelphia, PA 19106

Benjamin F. Stahl, Jr., Esquire
Clark, Ladner, Fortenbaugh & Young
1818 Market Street
Philadelphia, PA 19103

CERTIFICATION OF SERVICE

Vernon C. Miller, Jr. hereby certifies that a true and correct copy of the Petition for Rehearing In Banc was addressed to counsel for Bankers Trust Company, et al and BP/Sohio at the addresses noted above and hand delivered on Friday, June 19, 1981.

/s/ VERNON C. MILLER, JR.
Vernon C. Miller, Jr.

STATUTORY PROVISIONS INVOLVED

§ 183. Amount of liability; loss of life or bodily injury; privity imputed to owner; "seagoing vessel"

(a) The liability of the owner of any vessel, whether American or foreign, for any embezzlement, loss, or destruction by any person of any property, goods, or merchandise shipped or put on board of such vessel, or for any loss, damage, or injury by collision, or for any act, matter, or thing, loss, damage, or forfeiture, done, occasioned, or incurred, without the privity or knowledge of such owner or owners, shall not, except in the cases provided for in subsection (b) of this section, exceed the amount or value of the interest of such owner in such vessel, and her freight then pending.

(b) In the case of any seagoing vessel, if the amount of the owner's liability as limited under subsection (a) of this section is insufficient to pay all losses in full, and the portion of such amount applicable to the payment of losses in respect of loss of life or bodily injury is less than $60 per ton of such vessel's tonnage, such portion shall be increased to an amount equal to $60 per ton, to be available only for the payment of losses in respect of loss of life or bodily injury. If such portion so increased is insufficient to pay such losses in full, they shall be paid therefrom in proportion to their respective amounts.

(c) For the purposes of this section the tonnage of a seagoing steam or motor vessel shall be her gross tonnage without deduction on account of engine room, and the tonnage of a seagoing sailing vessel shall be her registered tonnage: *Provided,* That there shall not be included in such tonnage any space occupied by seamen or apprentices and appropriated to their use.

(d) The owner of any such seagoing vessel shall be liable in respect of loss of life or bodily injury arising on distinct occasions to the same extent as if no other loss of life or bodily injury had arisen.

(e) In respect of loss of life or bodily injury the privity or knowledge of the master of a seagoing vessel or of the superintendent or managing agent of the owner thereof, at or prior to the commencement of each voyage, shall be deemed conclusively the privity or knowledge of the owner of such vessel.

(f) As used in subsections (b), (c), (d), and (e) of this section and in section 183b of this title, the term "seagoing vessel" shall not include pleasure yachts, tugs, towboats, towing vessels, tank vessels, fishing vessels or their tenders, self-propelled lighters, nondescript self-propelled vessels, canal boats, scows, car floats, barges, lighters, or nondescript non-self-propelled vessels, even though the same may be seagoing vessels within the meaning of such term as used in section 188 of this title. R.S. § 4283; Aug. 29, 1935, c. 804, § 1, 49 Stat. 960; June 5, 1936, c. 521, § 1, 49 Stat. 1479.

EXCERPTS FROM TRANSCRIPT OF TESTIMONY

CORLETT—Direct

[1407]

We have the accident rates as set forth on lines 1, 3 and 5. The rates on 2, 4 and 6 are assumed and may be, for the purposes of illustration, Your Honor.

Mr. Stahl: Aren't they also in the sea trials?

Mr. Palmer: They are in the sea trial record.

The Court: You see, Mr. Young, I think basically what's being offered through the Court is, assuming that he is correct on the assumptions that he has made, based on the sea trials and based on the opinion he has stated to this Court, that he doesn't figure at all or include in his assumptions what the human element is involved. What he's merely saying, in effect, is the engines at astern state when the sea trials were on, the engines were deteriorated and even at that rate, even if applied immediately, would not have accomplished the purpose.

Mr. Young: That's the evil of the testimony, Your Honor, this testimony, the testimony of record in here by the eyewitnesses and the document of record is that's the application he gave that night and that's the human element. Now you're

[1408]

getting all these assumptions in here.

The Court: He's taking out the human element.

Mr. Young: It's completely irrelevant.

The Court: He's taking out the human element and looking at the engine itself. His opinion is that the engines, within the time that the ship was built and tested until the date of the accident, had deteriorated and the

deterioration was such that it couldn't achieve the kind of purpose that the ship would have reached in order to prevent this accident.

That's what is his opinion as an expert. He's not saying that somebody took five seconds or had done it in two seconds or three seconds, that it wouldn't have happened. He's saying that this is what the situation was because the engines had deteriorated so badly.

Mr. Young: Somebody who has not seen the ship operated, the ship, or anything else, it is entirely irrelevant to this case, Your Honor, and I move to strike.

The Court: That's not necessary to have that. He's not a fact witness. He's being

[1409]

offered here, as an expert witness, like any other expert witness.

Mr. Young: But, Your Honor, there's no evidence, here, that anyone ever asked for more than 70 rpm's.

The Court: That may be true.

Mr. Young: Or slightly in excess of 70.

The Court: His position is, if I understand his opinion correctly, the engines were in such bad shape, even if they responded, they couldn't have done the job because of the situation they were in. That's his position.

Mr. Young: How can anyone say that, because it wasn't asked for.

The Court: It isn't that they weren't asked for. He's giving you a number of suppositions that even if they had cleaved to that standard, they couldn't have accomplished the purposes. That's his position.

Mr. Young: My objection is on the record.

The Court: All right. But he's also basing that on the other evidence that's been

[1410]

presented, that it is the metallurgist and Mr. Watson, who was here, he has listened to that evidence and he's put this together. That goes to the weight which you wish to offer to the expert testimony. That's what a Fact-Finder must listen to.

Now, unless you tell me that he doesn't have any expertise or it's not in keeping within what's been presented as part of the facts, then that's a different aspect of it.

Mr. Young: That's it, it's not in keeping.

The Court: Are these facts stated, completely erroneous, that they would not fit in with what we've been talking about?

In other words, are not the logs on the bridge and the log in the engine room reflective of what he's put on the board?

Mr. Young: They are. The logger tapes, yes.

The Court: They are.

Mr. Young: They reflect what they asked for, with slight differences on the bridge and the engine.

The Court: All right. And that's what

[1411]

he is basing his assumptions on.

Now, if he used other numbers or conjectured other numbers than those, they would not be able to be commented on anymore than a hypothetical must include the facts of a trial.

I'll overrule the objection. Anything further?

Mr. Palmer: Yes, Your Honor.

The Court: Ask your next question.

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[2447]

Mr. Letulle: Yes, Your Honor. About 43 objections. C-6, objection.

The Court: What is the objection?

Mr. Letulle: The so-called sea trial recording tape.

The Court: There was testimony to that.
Objection overruled.

Mr. Letulle: For the record, we note the objection is to authenticity, based on Rule 901 as to evidence, and also as to the hearsay objection on Rule 802.

The Court: Overruled.
Anything else?

Mr. Letulle: C-87.

The Court: Wasn't there testimony about this at trial?

Mr. Letulle: There was testimony about the report of Dr. Corlett's reliance in large part upon matters which were hearsay which are not admissible into evidence. It is our contention, and therefore to have the entire report offered is objectionable and it is cumulative.

The Court: When is the only time under the law somebody can give his opinion?

Mr. Letulle: When he is an expert.

The Court: What he is doing in effect is

[2448]

telling us what he assumed because he is not an eyewitness

and he is giving us his opinion. Otherwise, he would be a fact witness.

Mr. Letulle: He is giving his opinion. That is a matter of record. The report contains much that he did not testify about.

The Court: The Court will receive those calculations and that part of his report that is buttressing his opinion.

Mr. Letulle: The opinion testified about in court.

The Court: Right, period.
Do you still want to object to that?

Mr. Letulle: As long as that is clearly understood.

The Court: Yes, sir.

Mr. Letulle: Part of the report refers to other tapes.

The Court: How can the Court receive a report he did not testify to? That is in the record. What he has given us is his calculations that buttresses his report. That is all it is offered to.

Mr. Letulle: We have no objections to its being introduced for the limited purposes.

TRIAL EXHIBIT C-7

ITEM RECORD

S.S. EDGAR M. QUEENY

HULL NO. 4626

BETH. ITEM NO. B-57

SOURCE: J. JENSEN LIST DATED 9/8/70

ITEM: 22. Astern guardian valve is getting so stiff its tripping breaker.

TRIAL EXHIBIT C-9

September 15, 1970

Mr. E. L. Insley
Supt., Quality Control
Bethlehem Steel Corporation
Shipbuilding Division
Sparrows Point, Maryland 21219

Dear Mr. Insley:

S.S. EDGAR M. QUEENY
Bethlehem Hull 4626
Deficiencies

Confirming my conversation with Mr. McKendrick, September 15, 1970, the subject vessel sailed from—Texas City, 1818 September 14, 1970 and is scheduled to arrive—New Haven, Conn. early morning, Sunday, September 20, 1970.

In addition to some of the items on the deficiency list which you may find practical and convenient to deal with, the following items are of major concern:

(a) *Bow Thruster*

Reported inoperative 9/14/70 at which time the Bird-Johnson representative was working on it.

In addition to repairs we request the Bird-Johnson representative board the vessel with the Pilot for the purpose of assisting the Pilot and Master in proper use of this equipment.

(b) *Back Winches*

Reported "creeping" incident to the valves in the hydraulic system.

A. C. Hoyle representative telephoned this office, he could not attend at Texas City, September 14, 1970. Please arrange for him to attend on arrival September 20, 1970.

(c) *Astern Guardian Valve*

Reported being worked on September 14, 1970. As of 1500 September 14, 1970, it was reported capable of being closed only half way.

(d) *High Injection Valve*

Reported at 1500, September 14, 1970, capable of being opened only half way.

Please keep us advised of plans you have made.

Very truly yours,

KEYSTONE SHIPPING CO., Agent

SFS/jec S. F. Spencer

cc: Messrs. W. A. Thurston, G. Patton
Keystone Shipping Co.

bcc: ABK JCK
RID CCW
SFS JEW
WGN
WG
4626—Guarantee
4626—Corr.

TRIAL EXHIBIT C-10

ITEM RECORD

S.S. EDGAR M. QUEENY
HULL NO. 4626

BETH. ITEM NO. B-34

SOURCE: S. F. Spencer letter to E. L. Insley dated 9/15/70

ITEM: c. *Astern Guardian Valve*

Reported being worked on September 14, 1970. As of 1500 September 14, 1970 it was reported being capable of only being closed half way.

Figure 10.1 of Dr. Corlett's Report, Trial Exhibit C-87, is being filed separately in a Supplementary Appendix for the convenience of the Court because it is oversized. It was referred to in the following pages of Villaneuva's Petition for Certiorari: 4, 5, 23 and 25.